Lettsomian Lectures

ON THE

COMBINATIONS OF MORBID CONDITIONS OF THE CHEST.

Delivered at the Medical Society of London on Jan. 21st, 1895,

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LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—When, having accepted the honourable and responsible position of Lettsomian lecturer, I had to face the trying question of my subject, the one which I have chosen kept forcing itself upon my attention, until at last an irresistible impulse took hold of me to attempt to grapple with it. I am afraid that to many here present the title "Combinations of Morbid Conditions of the Chest" suggests a very uninteresting discussion. The subject certainly does not appeal to that craving for novelty which is so characteristic of the age, and from which even the medical profession is by no means free. I therefore feel it necessary to give two or three reasons for my selection. I take it for granted that the frequency and gravity of cases of chest disease, in every kind of practice and in every grade of social life, must be familiar to all. Not only do they contribute to an appalling extent to the general mortality, but the sufferings and miseries which they inflict upon humanity are beyond all calculation. I have had opportunities of observing and studying these cases on a somewhat large scale, and with increasing experience I have become more and more impressed with the importance of studying the combinations in which morbid conditions of the chest present themselves in individual instances in actual practice. Of course, such combinations are well known to those who have had a similar experience, but my observation has forced me to the conclusion that they are by no means so generally recognised and appreciated as they ought to be, while certain conditions which in my opinion are of real consequence are often entirely ignored. It is too much the custom to look upon thoracic cases as if they were cut-and-dried examples of individual diseases, as described in text-books and lectures, with which we associate distinctive names; to apply to them terms and expressions which have in reality no definite significance; or to fix upon some one prominent physical change or condition, to the exclusion and neglect of all others which may happen to be present. Even special treatises on chest diseases discuss the various affections in the main as if they were entirely separate and independent. Another reason which has influenced me in the choice of my subject is that it gives me the opportunity of uttering an emphatic protest against the absurd development of specialism in relation to this region which at the present day is working so much mischief, as well as against the narrow conceptions so widely entertained with regard to certain prominent modern theories and doctrines, in themselves of the highest importance, and the vagaries in so-called "scientific therapeutics" resulting therefrom. Chest specialism certainly deserves recognition quite as much as the majority of specialties, but only within due and rational limits. Anyone who knows anything about the important structures which occupy this cavity must recognise the necessity of being always prepared to study them, from a pathological and clinical point of view, not only in their more immediate connexions, but also in their relations to associated structures outside the thorax, and to other organs and systems of the body. And, further, the practice of dealing with each thoracic organ as if it were entirely separate and distinct, or, still more, of making a specialty of particular complaints, is both dangerous and absurd.

Permit me now to offer a few words of explanation in relation to the title which I have adopted for these lectures. In the first place, the word "chest" is used in a comprehensive sense, and is intended to include all structures which are directly associated with this region. These may be conveniently arranged in the following way: (1) the chest walls, including the superficial and muscular tissues, as well as the bony and cartilaginous framework; (2) the diaphragm, a structure as a rule entirely forgotten and ignored; (3) the lungs and pleuræ, with the trachea and its primary bronchial divisions; (4) the heart and pericardium, with the great vessels, both arteries and veins; (5) the less prominent contents of the mediastinum, including chiefly the œsophagus, absorbent glands, thoracic duct, and certain important nerves, but not forgetting also the thymus gland, and the mediastinal cellular tissue; and (6) the abdominal viscera which are contiguous to the diaphragm, and which, though not actually contained in the thoracic cavity, come normally more or less within the area covered by the ribs, especially the liver, stomach, and spleen.

Under the expression "morbid conditions" I include both functional disorders and organic changes. I am well aware that not a few object to the word "functional" as applied to any morbid state whatsoever, but I must pass over this question, and will only say that, in relation to the subject with which we are now concerned, disturbances affecting the important functions immediately connected with the thoracic structures, usually of a temporary nature, not uncommonly occupy a prominent place. With regard to organic changes, these are of various kinds, but, speaking generally, they may be conveniently grouped as follows: (1) those which are not injurious in themselves, but are important on account of the physical effects which they produce (and this class of lesions are often the remains of some previous acute or active disease); (2) permanent structural changes impairing the functions of organs; (3) more or less acute diseases or morbid conditions which are temporary, inasmuch as if they do not prove fatal within a limited period they as a rule clear up or disappear when their determining causes are removed; (4) changes which are grave in themselves, either from the immediate danger due to some serious lesion or from their essentially fatal tendency, or being of a destructive type or of a septic and infectious nature, or because they become the occasion of, or predispose to, dangerous secondary lesions; and (5) morbid conditions, often obvious enough and persistent, but which in reality are of a curative or compensatory character—these may be quite harmless, or even beneficial and helpful, but not uncommonly they are accompanied with impairment of function, owing to the permanent damage done to the affected organ. I have next to deal with the title of my subject as a whole, and to speak of the combinations of morbid conditions of the chest in the comprehensive sense just referred to. A large proportion of chest cases, as they come under our notice in living patients, to say nothing of undetected changes which we find post mortem, present various combinations of morbid conditions, for which, as medical practitioners, we have to be constantly on the look-out, otherwise we are ever in danger of going astray in our diagnosis. Many of these associated conditions can be readily and fully appreciated and understood by any properly trained clinical observer; but sometimes they become so numerous and complicated that it may be very difficult or even impossible to determine the exact state of things. A point which calls for notice here is that some cases become important, or even serious, simply because they present a number of conditions in combination, not one of which would in itself be of any material consequence.

I have classified under certain groups the chest conditions and their combinations which are likely to be met with, in the hope that such an arrangement may be practically useful for future reference, and as a basis for the study of individual cases; but I do not pretend in the time at my command to enter into details, or to describe the numerous combinations of chest conditions which I have personally observed. My object is merely to generalise, illustrating my remarks by the occasional mention of some specially instructive case. I have no intention whatever of giving a lengthy description of any case, nor do I propose to inflict upon you any statistics. Having completed this—the most important—part of my subject, I desire afterwards to indicate briefly some clinical lessons which its consideration suggests, especially in relation to the investigation of chest cases; and, in conclusion, to submit a few general remarks as to its bearing upon their diagnosis, prognosis, and treatment.

SYNOPSIS

General Classification of Morbid Conditions of the Chest and their Combinations.

I. Conditions of the chest walls and diaphragm.
II. Slight or indefinite intra-thoracic changes.

III. Combinations of changes belonging to Nos. I. and II.
IV. Secondary effects of certain intra-thoracic physical conditions.
V. Combinations of chronic diseases or their remains.
VI. Combinations in acute cases.
VII. Combinations due to accidental lesions or complications, usually sudden.
VIII. Combinations associated with sudden or acute disorders of function, temporary or paroxysmal.
IX. Combined conditions originating from the abdomen.

In the first instance I submit for your consideration a table which presents a general outline or sketch of the course which I propose to take in discussing the part of my subject with which we are now concerned, and this may afford some comprehensive idea as to the classes of chest cases in which we are likely to meet with various combinations of morbid conditions. Without further comment I proceed to discuss the several groups mentioned.

I.—CONDITIONS OF THE CHEST WALLS AND DIAPHRAGM.

That great clinical teacher, Sir William Jenner, used to impress upon us as students some important facts about the chest walls; but my observation compels me to say that nowadays they are not regarded as of much account. I suppose that anyone who makes the slightest pretension to being a clinical observer could scarcely fail to be attracted by such striking and prominent conditions as subcutaneous œdema or emphysema, the presence of a growth, or an extreme deformity; but I fear that other less attractive changes are seldom thought of, though in reality they not uncommonly add seriously to the sufferings and difficulties of the patient. It would be altogether beyond the province of my subject to attempt to discuss in detail the numerous morbid conditions of the chest walls and diaphragm; but I wish to point out emphatically that these structures, and the former especially, are always well worthy of consideration when dealing with thoracic cases. The skin of the chest sometimes, less commonly now than formerly, shows the marks of some energetic local treatment by cupping, leeching, &c., which suggest that the patient had an acute intra-thoracic inflammatory attack at some time or other, likely to leave behind permanent changes, of the existence of which in the particular case it is desirable for us to be aware, but which we cannot definitely detect. Further, a scar may draw attention to a former operation for pleural effusion or an empyema. As illustrations of the association of superficial conditions with those within the chest the following may be mentioned. Painful sensations in many cases of internal disease of different kinds are certainly connected with the superficial structures, whether neuralgic, neuritic, myalgic, "referred," or by whatever other name they may be called. Cutaneous hyperæsthesia is also sometimes very pronounced. Spasm of the muscles of the chest walls may likewise be associated with some internal disorders. It is well known that pleurisy may be associated with herpes zoster, or with an extensive burn or scald of the thorax, as well as with injury, and the results remain in the form of adhesions. Certain states of the chest walls may occasion a disturbance of the normal internal arrangements, as in the case of a cleft sternum, or when a ruptured muscle allows a hernia of the lung to take place. Having given these general illustrations, I cannot resist making a few remarks upon certain individual conditions connected with the chest walls, simple enough in themselves, and of very frequent occurrence in association with internal diseases, but which, from their very frequency and simplicity, are constantly overlooked and neglected in practice.

Wasting of the superficial tissues and muscles.—Wasting of the soft structures of the chest walls, and especially of the muscles, is a very common factor in diseases of this region, being noticed most conspicuously, but by no means solely, in cases of phthisis. Its local effects ought always to be fully taken into consideration, and it must not be merely regarded as a part of the general wasting. I do not suppose that in its minor degrees it contributes appreciably to the troubles of the patient, but marked emaciation may add materially to the difficulties of the acts of breathing, coughing, and expectoration, contributing but too obviously to the distress and inefficiency of these acts, while under certain circumstances it may become an immediate source of danger.

Softness of the ribs.—This condition is natural during early life, but its association with different affections involving the lungs must always be kept in mind. Any obstruction to the passage of air through the main air tube, or even a slight bronchial catarrh, and still more a serious bronchitis or pneumonia, becomes under the circumstances unusually important, and its possible effects must be estimated accordingly. Softness of the ribs as a morbid state is very often met with in children as a consequence of rickets; in adults the condition is only of very rare occurrence in connexion with osteomalacia.

Rigidity of the chest walls.—The changes which take place in the framework of the thorax, leading to undue firmness or rigidity, with consequent interference with its mobility, amounting in extreme cases to absolute fixation, are of common occurrence under a variety of circumstances, and are not infrequently of decided consequence. I make it an invariable rule to look for them when dealing with any chest case, at any rate in subjects approaching or beyond adult life, and to endeavour to estimate their effects in relation to certain physical signs and symptoms, and yet my experience compels me to say that they seldom attract the notice they deserve, even when of a very pronounced character. The changes which produce the rigidity are well known, consisting of undue calcification of the ribs and sternum, with incomplete ossification or calcification of the cartilages; while changes also take place in the joints, which ultimately lead to their more or less complete ankylosis. Of course, these changes develop naturally with advancing age, and there is at any rate no excuse for overlooking them in old people. But the more or less "rigid chest" is quite frequently met with in individuals who have not yet reached middle life; and in the ordinary run of practice it is astonishing how often it is revealed in the examination of even young subjects. Under these circumstances it is generally, but not always, obviously traceable to the effects of hard physical work, excessive indulgence in athletic and allied exercises, injudicious training for the public services, and like causes. The changes which lead to rigidity of the chest walls may be but a part of the entire case, developing along with other morbid processes which are taking place within the thorax, or being in some instances probably the secondary result of these processes. The effects of a rigid chest are easily understood, and it is readily detected by physical examination. Speaking generally, its most obvious consequences are that it interferes more or less seriously with the respiratory movements—expiratory as well as inspiratory—the thoracic walls becoming in extreme cases absolutely fixed and immobile; and that it prevents their expansion under certain circumstances. Now in itself this condition may not lead to any obvious disturbance; but let it be associated with internal thoracic diseases of different kinds, and its effects become at once apparent, especially if the thorax happens to be of small capacity. It is remarkable, for instance, how it adds to the severity of the symptoms of, it may be, only a slight bronchial catarrh; while it becomes in itself a real source of danger when any pronounced acute inflammatory affection develops within the chest, and especially if it should lead to some definite physical condition which encroaches upon the thoracic cavity, such as pleuritic or pericardial effusion. Again, rigidity of the walls may greatly limit or actually prevent the distension or expansion of the chest, which should be the natural result of certain intra thoracic conditions, and may thus be of serious consequence. The most striking illustration of this statement is afforded by a certain class of emphysematous cases. I need scarcely say that extensive vesicular pulmonary emphysema tends to cause general enlargement of the thorax, which up to a certain point may be regarded as a tendency in this region to accommodate itself to circumstances. But when this condition develops for the first time late in life, or in a person whose thorax has become prematurely rigid, such enlargement is either entirely prevented, or it is so much curtailed and modified in its details, that it in no respect falls in with the ordinary description of an emphysematous chest. Moreover, under these circumstances the symptoms are obviously likely to be much more pronounced and troublesome than they otherwise would be. I have also met with cases of greatly enlarged heart in which the rigid chest walls would not yield, and consequently no cardiac bulging could be produced, so that the organ was obliged to encroach upon the thoracic space and to interfere with the other contents of the thorax, as well as with the diaphragm, the symptoms being accordingly much more severe than they would otherwise have been.

Abnormalities in shape and capacity: chest deformities.—The conditions which come under this heading are important in themselves, as well as extremely interesting in relation to

chest affections. A chest of contracted dimensions and small capacity ought to be regarded as a "morbid condition," whether it is the outcome of a natural delicacy of frame or of a want of proper development in early life, or is the result of internal disease. When primary, it is necessarily associated with a state of things within the thorax which undoubtedly predisposes to a certain class of diseases, and in course of time we are confronted with the manifestations of the combined conditions in many of the cases of phthisis which we meet with. In the opposite direction, a chest that is over-distended from any cause is in itself actually morbid, and is not merely an indication of some internal disease, a fact of which the athletes of the present day may well take note. The different unilateral and local changes in the shape and size of the thorax that so frequently come before us must also not be regarded as mere "physical signs" of various conditions, inasmuch as they themselves frequently constitute a part of the entire group of morbid changes with which we are concerned. It is, however, possible to attach an undue importance to slight changes of this kind. It is well not to jump to the conclusion that an intra clavicular depression necessarily means phthisis, or that the bending forwards of a rib cartilage is the prominent sign of an aneurysm. Pronounced deformities of the chest, especially those resulting from spinal disease, are often very sad and trying, if only on account of the immediate effects of the deformity upon the contents of the thorax; when, in addition, the walls become rigid, while various acute or chronic intra-thoracic diseases supervene, which are by no means necessarily the direct outcome of the deformity, the entire complication is often very perplexing, while the symptoms are proportionately grave, and sooner or later the termination must inevitably be fatal.

Conditions affecting the diaphragm.—Different conditions of the diaphragm may follow upon—

(*a*) Functional disorders; spasm; paralysis.
(*b*) Mechanical embarrassment or displacement.
(*c*) Acute inflammation; diaphragmatic pleurisy.
(*d*) Adhesion to neighbouring structures.
(*e*) Chronic structural changes; atrophy; fatty degeneration; fibroid changes.
(*f*) Rupture, perforation, or congenital deficiency.

I now only indicate in a general way the morbid conditions which may affect the diaphragm, and remind you that one or other of these conditions is in not a few instances an important factor in connexion with intra-thoracic diseases, of which I may give some illustrations later, and your own experience will probably bring to your remembrance individual cases exemplifying this point.

II.—Slight or Indefinite Intra-thoracic Changes.

Under this head I wish to draw attention very briefly to certain changes which take place within the chest, and I term them "indefinite" because, though of very common occurrence, and in many instances easily made out by skilled investigation, they give rise to no evident symptoms, and, indeed, can often only be detected by methodical and careful physical examination. In some cases, moreover, their presence, though it may be reasonably suspected, is rather a matter of inference or guesswork than of actual demonstration. The conditions to which I allude are: 1. Localised pleuritic or possibly pericardial adhesions. 2. Ill-defined changes in the pulmonary structures, such as senile atrophy, lesser degrees of over-distension of the lungs or even of true vesicular emphysema, commencing degeneration, impairing the pulmonary elasticity and expiratory force, and limited fibrotic changes, the remains of a cured phthisis or other past lesion. 3. The lesser degrees of atheromatous degeneration of the thoracic aorta and its main branches. 4. Atrophy or early degenerative changes affecting the heart walls, or infiltration of its muscular tissue with fat. I may note, by the way, that the viscera and other structures are in exceptional instances congenitally transposed, and this is a condition of an indefinite nature to be borne in mind as a possible accompaniment of pronounced intra-thoracic disease, especially in relation to the heart. Most of the changes to which I have referred usually come on gradually and imperceptibly as the natural result of the wear and tear of life, or of other causes to which I have alluded when speaking of the chest walls. Some of them, however, may be the remains of a past illness, of which the patient may be aware or of which he has no distinct remembrance. Intra-thoracic adhesions, even of considerable extent, are, it is well known, not uncommonly found post mortem, the origin of which cannot be traced and the existence of which was not recognised during life. At the same time, I venture to assert that many such adhesions can be easily detected by proper examination, if there has been an opportunity for carrying it out in the living patient.

III.—Combinations of Changes belonging to I. and II.

Although I have dwelt so long upon conditions which may appear to be of minor importance, I must still ask your attention for a moment to a distinct group of cases, of which I have seen numerous examples, and which are characterised by the presence of certain of these conditions in combination, affecting both the walls and the contents of the thorax, and therefore assuming a degree of importance which they would not otherwise possess. In these cases the superficial structures are more or less wasted—it may be considerably; the chest walls are obviously rigid; localised pleuritic adhesions can be made out—it may be in several spots; there are no gross lesions to be detected in the lungs, but these organs are evidently wanting in normal elasticity and tending towards degeneration, perhaps also exhibiting limited areas of emphysema, or there is a suspicion of a fibrotic change here and there; sometimes there are indications of commencing atheroma of the aorta, or the heart is feeble in its action and is probably of actually small size. Now I maintain that cases of this kind ought to be definitely recognised, though it is difficult or even impossible to apply to them any particular designation. They do not exactly belong to the chronic emphysematous or the phthisical group, and they can only be included under that somewhat vague category known as a "weak chest." The patients who suffer from this combination of changes are fully aware of their existence, for at any rate they affect their breathing powers considerably, while they render them extremely susceptible to the effects of even a slight cause likely to act injuriously upon the respiratory organs. Still, so long as they keep quiet and consent, and are able, to remain in a comfortable house or room during the colder seasons of the year, or to reside in some more genial and suitable climate than ours, they get on very well. Let them, however, have even the slightest bronchial catarrh, or, still more, a pronounced acute bronchitis or a pneumonic attack, and their troubles increase at once in a marked degree, while the danger to life also becomes for obvious reasons very serious, quite out of proportion to the acute illness in itself, and I know of few more anxious combinations of conditions to deal with in practice.

IV.—Secondary Effects of Certain Intra-thoracic Physical Conditions.

Here I merely wish to point out that given a particular physical condition within the chest, others are likely, or in many instances certain, to be produced by it as secondary consequences, varying in their nature and degree within well-known limits. Hence it happens that the case presents itself as a more or less complex one, there being a combination of morbid conditions which it is incumbent upon us to recognise, at the same time endeavouring to determine and estimate how far each contributes to the sum total of the clinical phenomena observed. It is too much the custom to look upon these secondary effects as mere "physical signs" of the primary condition, their real importance in themselves being overlooked, or at any rate not adequately appreciated. As illustrations of the more prominent conditions which originate this more or less complicated state of things—to some of which I shall have again to refer—I may mention a large fluid or gaseous accumulation in the pleural cavity, or a much thickened and extensively adherent pleura; pericardial effusion; marked general emphysema, and an intra-thoracic tumour of any description, whether aneurysmal, solid, or of other kinds. I may draw attention to one special point in this connexion—namely, that when from any cause the action of either lung is extensively interfered with, the opposite one almost necessarily undergoes compensatory enlargement, and the combination may be easily misunderstood unless due care be exercised.

V.—Combinations of Chronic Diseases or their Remains.

In speaking of the remains of chronic diseases I refer to what are truly morbid changes, not active, and often the manifestations of the arrest of destructive or other injurious processes, and of an attempt at repair of the damage. It will be observed that in some groups the changes are practically confined to one particular structure or class of

structures; in others two or more are involved, but in a large proportion of these cases the connexion between the several lesions is sufficiently obvious and intelligible, if properly studied. Sometimes, however, the morbid changes are quite independent of each other, or they become so complicated that it is very difficult or even impossible to trace any distinct relation between them. It would obviously be impossible in the time at my command to discuss the several conditions at any length, and my observations are meant to be merely of a general character.

A.—Respiratory Apparatus.

There are many chronic chest cases in which the morbid conditions, though more or less complex, are practically confined to the respiratory apparatus, and these cases I now proceed to consider.

Pleuritic.—There is a definite class of chronic chest cases in which we have practically to deal with prominent morbid states of the pleura and their immediate consequences. They have either started in a well marked attack of pleurisy with effusion or have followed an empyema which has opened into the lung or been operated upon, or they have sometimes developed slowly and imperceptibly. In exceptional instances they appear to have originated in a limited pneumothorax, which has probably been associated with phthisis, the progress of this disease having been checked by the pleural lesions. The large majority of chronic pleuritic cases are simple enough, but in some instances the conditions are decidedly complicated, and we may meet with various combinations of adhesions, great thickening, localised collections of fluid, or possibly even the remains of a pneumothorax or pyo-pneumothorax. Nor must I forget to note here that the pleura may be the special seat of an extensive tuberculous or malignant infiltration, which still further complicates matters. The important practical lesson for us is, that when brought into contact with what is obviously a chronic pleuritic case, we must not jump to the conclusion that we have to deal simply with an effusion.

Pulmonary and air tubes.—Of course, there is no definite line of demarcation between the bronchial ramifications and the other tissues which enter into the construction of the lungs, and it is a familiar fact that they are all more or less implicated in a large number of cases. Under this head, however, it will be convenient to notice also certain lesions affecting the main air passage or its primary bronchial divisions which are liable to be met with in connexion with some lung diseases. The following subdivisions indicate fairly clearly the aspects under which the large majority of chronic pulmonary cases come before us in practice, and I propose to say a few words about each.

(*a*) Phthisical.—Many of the laity talk glibly about microbes, tubercle bacilli, tuberculous granulations, and the like, and are ever on the look-out for the latest "cure" for this disease without seeming to realise in the least that there are any actual lesions, pulmonary or other, and even when the chest and its contents have become a total wreck their eyes are not opened to the absurdity of their notions, and they will fly to any quack who promises a cure. Of course, I do not suggest that these ideas are held by any medical man of average education, but I must say that what one reads and hears indicates rather an undue fondness for bacilli, and often reveals a want of due appreciation of the actual morbid changes which ordinarily characterise phthisical cases, especially as regards their extent and combinations. It is not my business on the present occasion to discuss the pathology of phthisis or to describe its lesions; nor do I wish to minimise in the smallest degree the importance of the bacillary doctrine in relation to this complaint. My subject, however, compels me to point out that the changes in the lungs themselves, setting aside other thoracic structures, are definite enough and well understood, are often of a pronounced nature, and in cases of some duration are sure to be more or less combined, ultimately not uncommonly culminating in a highly complicated state of things. As the evidence and results of the phthisical process in these organs we have to deal with distinct areas or masses of consolidation—tuberculous, inflammatory, caseous, or mixed; miliary tubercles, diffused or in groups; softening of these structures and breaking down, leading to destruction of the pulmonary tissues; cavities in all varieties of size, shape, characters of walls and surroundings, and contents, more or less suppuration usually taking place in them; as well as with changes indicating a tendency to arrest of the disease in places, and to a reparative process, especially the formation of a fibroid tissue, which leads to induration and contraction of the affected portion of lung, with narrowing, and it may be even ultimate closure of cavities. Then we have to recognise also, in many cases, an associated bronchitis, which contributes more or less to the expectoration; while in some instances there are definite tuberculous ulcers in the larger bronchi or the trachea. The more pronounced laryngeal complications of phthisis hardly come within the scope of my subject, as the larynx is outside the thoracic cavity, but I may point out that laryngeal symptoms are occasionally produced by the effect of phthisical changes upon intrathoracic nerves, and these also must not be overlooked. Again, in parts of the lungs not actually phthisical, compensatory distension, or so-called emphysema, is often met with; and, further, there are vascular changes, but the only one I need specially mention is the possible development of an aneurysm on a branch of the pulmonary artery within a cavity. In that special group of cases known as "mechanical phthisis" there is the additional element of the solid foreign particles infiltrating the lung tissues. It is very important to recognise the pathological nature of the different solid materials met with in phthisical lungs, and it is quite incorrect, as well as misleading, to sum them all up under the general term "consolidation."

(*b*) Emphysematous and Bronchitic.—The term "emphysema" is used not uncommonly in a very loose fashion, to signify any abnormal pulmonary distension or accumulation of air in the lungs, whether general, unilateral, or local. I am at present concerned, however, with the real disease, in which not only are both these organs more or less enlarged and distended, but their tissues have also undergone certain structural changes, chiefly evidenced by impairment or loss of elasticity. Now this condition is very likely to be associated with a chronic bronchial catarrh or bronchitis of some kind, though there are times when the patient may be practically free from any such trouble, while it is liable to periodical exacerbations from the action of well known causes. In many instances, of course, it is the bronchitis which has been the primary disease, and it may be affirmed as a general statement that this complaint cannot persist for any length of time without producing more or less emphysema—even in early life. I have often been distressed by the pitiful sight of young subjects suffering in this way, evidently as the consequence of ignorance or neglect. In whatever manner they may have commenced a large number of the cases designated "emphysema and bronchitis" are comparatively simple; but even then we ought to try to determine certain details, as, for example, the degree of distension of the lungs, the amount and nature of the changes in their tissues, and how far their elasticity is impaired, the kind of bronchitis, with its amount and mode of distribution, and the state of the chest walls. I have already referred to the importance of rigidity of the thorax in relation to the emphysematous condition. In emphysematous and bronchitic cases the lungs occasionally become more distended than usual, owing to the escape of air from them being obstructed by the conditions of the bronchi. Under such circumstances the emphysema appears to be greater in degree and extent than it actually is, and when the obstruction is removed the lungs diminish in bulk—it may be considerably,—as evidenced by the size of the chest, while its movements also improve in proportion. With regard to the changes affecting the bronchi in the cases now under consideration, we have to bear in mind not only that there are different varieties of bronchitis, but also that the walls of these tubes are in time likely to undergo serious permanent changes, their mucous lining becoming disorganised and more or less extensive bronchial dilatation being often finally established. Bronchiectasis should more especially be remembered as a possible condition, because extensive emphysema will often completely obscure the physical signs which may be expected to reveal the presence of the dilated tubes. Plastic bronchitis is a rare variety which may be associated with a more or less emphysematous state of the lungs.

(*c*) Chronic Pneumonic.—I can only very briefly refer to the conditions which come under this heading. There are the well-known cases of chronic interstitial pneumonia, which are described under the terms "cirrhotic or fibroid lung," "fibroid phthisis," &c. These in time assume a decidedly complex character, in whatever way they may have originated. The fibroid change is limited in most cases mainly or entirely to one lung, or a portion of it, which is thus hardened and contracted, the involved structures being rendered quite useless; it is also often accompanied with the remains of

phthisical cavities, and still more frequently with dilated bronchi; while unaffected areas of the same lung, as well as the opposite one, become the seat of compensatory distension, which may ultimately terminate in true emphysema. Sometimes both lungs are involved in unequal degrees, or if one is not fibrotic it is frequently the seat of bronchitis. There is an exceptional class of chronic pneumonic cases which may prove very puzzling. In these one lung is absolutely solid, either throughout or over a large extent, but instead of being contracted it is more or less enlarged. The opposite lung becomes greatly distended, and also in some instances the seat of dry bronchial catarrh; so that the general aspect of the patient, as well as the prominent symptoms, may resemble closely at first sight those of an extreme case of emphysema and bronchitis, with an asthmatic tendency.

(*d*) Syphilitic.—Time forbids my doing more than allude to these cases. They are somewhat indefinite from a clinical point of view, though they occasionally present distinct combinations of different morbid conditions, which it may be possible to recognise during life.

(*e*) Mixed.—I have already given illustrations of mixed conditions in the lungs in my discussion of the specially named groups; but I have thought it desirable to designate by this term a particular class of cases in order to emphasise the fact that any of the pulmonary lesions which I have been thus far considering may be met with together in almost every conceivable variety of combination. There are two points to which I more especially wish to draw your attention in this connexion. I have heard it often stated—and it seems to be rather a prevalent idea—that emphysema and tuberculosis are antagonistic and are rarely observed together. Now, as a matter of fact, phthisical changes are not at all uncommon even in markedly emphysematous lungs, while it is quite usual to find the two conditions associated together in different parts of the same organs. Under these circumstances the physical signs of the tuberculous lesions are very likely to be obscured, and we may have to rely very much on the symptoms in their diagnosis. The other point to which I must refer is the relation between phthisis and chronic bronchitis. There is a distinct class of cases in which, chronic bronchitis having existed in a more or less pronounced form for a variable period, tuberculous changes ultimately supervene, which are easily explained on the bacillary theory, and the clinical phenomena reveal definitely enough a combination of the two diseases. The danger is lest the development of the tuberculous lesion under such circumstances is not recognised; and my observations have led me to the conclusion that not a few cases regarded as bronchitic are in reality phthisical, and that they are so recorded in death certificates—a most important matter in relation to life assurance and to the question of the heredity of phthisis. This oversight is especially liable to happen in the case of patients advanced in years, a statement in support of which I could mention many examples from personal knowledge.

(*f*) Pleuritic and Pulmonary.—These combinations frequently present themselves under different aspects in practice, but I can only give a few of the more prominent illustrations. Firstly, we have the fairly simple cases, in which, as the result of a definite attack of pleurisy with effusion, or perhaps an empyema, the effects produced by these conditions on the lungs remain persistent, though there is no further active mischief in these organs. That is to say, the lung on the affected side continues in a more or less condensed or collapsed state, being bound down by pleural adhesions, probably becoming also in course of time somewhat fibroid; while the opposite one presents various degrees of distension or compensatory hypertrophy. This combination may remain quiescent for an indefinite period. Secondly, it must be borne in mind that pleural adhesions are most important factors in a large number of cases belonging to the pulmonary groups considered under the previous heading. In chronic phthisis, for instance, it is quite common to find one lung universally adherent, the change often extending much beyond the limits of the actual pulmonary disease, while the opposite organ may be also partially fixed in a similar way. Of course, in some of these cases the phthisis is secondary to the pleuritic condition, but the lesions as they come before us are practically the same. It is at the present time a favourite doctrine that most cases of pleurisy are originally tuberculous; although I do not agree with this doctrine as a general statement, I fully recognise the great importance of pleuritic conditions in relation to phthisis. Local adhesions are very frequent in association with emphysema and bronchitis. A somewhat complicated class of cases occasionally present themselves which, without due care, are very liable to be regarded as merely "emphysematous and bronchitic." Their history is that the patient has had a distinct attack of pleurisy which has left one lung universally adherent and probably somewhat compressed, while the opposite lung has undergone compensatory hypertrophy. In course of time, however, the enlarged organ becomes truly emphysematous, and ultimately greatly distended, while the compressed lung may also expand under certain circumstances, and subsequently become emphysematous. Thirdly, there are definite cases of a chronic phthisical nature in which pulmonary and pleuritic lesions exist together in a pronounced form, including, perhaps, the remains of a pneumothorax, and the combination may be very perplexing. Occasionally one meets with phthisis at one apex and an effusion on the opposite side, which returns again and again after removal by paracentesis, being evidently of a tuberculous nature. Lastly, an important class of cases, where the pleura and lung are involved together, are those in which an empyema has burst into the lung, and the discharge of pus in this direction has persisted as a chronic state, the matter being usually coughed up at intervals. In short, we have then to deal with a pyo-pneumothorax which is periodically emptied, partially or entirely, by way of the air passages.

B.—Pericardial, Cardiac, and Vascular.

A systematic and comprehensive knowledge of the various chronic morbid conditions which may affect the pericardium, heart, and great vessels is particularly helpful to a clinical observer. Of course, it is quite out of the question to give in these lectures any classification of the several ways in which these morbid conditions may be associated, and without further comment I can only submit the following propositions:—

(*a*) That a large proportion of cases of cardiac disease are, in relation to the structures immediately concerned, by no means so simple as they are often thought to be, and that most of them must inevitably at some period or other of their history present various combinations of morbid changes.

(*b*) That pericardial adhesion or agglutination is a most important element in not a few chronic heart cases, and should therefore always be borne in remembrance, especially as it can frequently be easily recognised.

(*c*) That in every individual case it is essential to think of all the conditions associated with the heart itself, and to study them intelligently, being guided by an adequate general knowledge of the probable combinations which may be anticipated under particular circumstances. I may allude here to the fact that it is quite common to find two or more orifices and their valves affected in the same case, and the well-known consequences of these lesions will be modified accordingly.

(*d*) That functional disorder of the action of the heart does often modify from time to time, or even persistently, in a remarkable way and degree, the phenomena associated with organic cardiac affections, both symptoms and physical signs, and it should therefore be made a rule to study systematically in every case the mode in which the heart is performing its functions, in relation to the organic changes that happen to be present. In short, we have frequently to deal with a combination of organic diseases and functional derangement of this organ, which it is most important to recognise.

(*e*) That it is also of the highest importance always to attend to the great vessels within the chest and those of the neck, as these are commonly affected in various ways along with the heart, or may reveal conditions of this organ which cannot otherwise be definitely determined. The frequency of extensive atheroma or calcification of the aorta and its large branches in cases of cardiac disease ought never to be forgotten, or there may even be dilatation or an aneurysm.

C.—Respiratory and Circulatory.

The next group of chronic chest cases of a combined nature is that in which the respiratory and circulatory apparatus are involved more or less at the same time. We often meet with combinations exemplifying, on the one hand, the effects of mitral disease on the lungs, and, on the other, those of prolonged emphysema and bronchitis upon the right heart. Again, when the lungs are highly emphysematous the heart and pericardium become more or less completely covered, while at the same time the right side of the heart seems to be pushed down towards the epigastrium. On the other hand, as the result of contractile changes in connexion

with chronic phthisis or pleurisy, the pericardium and its enclosed structures become unduly exposed, or the large vessels may be also uncovered. A very large heart compresses the left lung more or less, and I have known the organ to be completely collapsed and airless from this cause. Another class of cases in which the respiratory and circulatory apparatus present combinations of chronic morbid conditions are those where the changes are the effects of the same cause or causes, which have operated upon both sets of structures. As I shall show in the next lecture, they may be involved in an acute inflammatory process at the same time, and the remains are likely to come before us under a more or less complex aspect.

D.—Special Diseases.

Under this heading I allude to certain classes of chest cases, each of which demands independent study and consideration, including especially aneurysm, glandular enlargements and other solid tumours, hydatids, actinomycosis, and œsophageal pouching. These severally give rise to various combined morbid conditions, but I can only offer two or three general remarks about aneurysm and glandular enlargements, or other kinds of intra-thoracic tumour. It is necessary to be constantly on the look-out for these kinds of cases, and especially aneurysm, for, although they are of comparatively infrequent occurrence, we never know when they may come under our notice. Enlarged bronchial or other glands within the chest is another condition to be remembered, especially in children. In relation to a thoracic aneurysm or solid tumour, we have not only to think of these conditions in themselves, but also of their effects upon adjoining structures. An aneurysm of the aorta may come before us under the guise of what appears to be a mere case of "emphysema and bronchitis," the result of pressure on the trachea the aneurysm itself being entirely obscured by the distended lungs, and out of reach.

E.—Independent Diseases.

Under this head I only wish to say that there are cases of chronic chest disease in which morbid conditions are associated together, having no direct connexion with each other, and being in reality quite independent. For instance, I have met with not a few cases of phthisis and cardiac disease which would come under this category, as well as exceptional instances of aneurysm and phthisis. Another illustration is the association of right pleurisy with cardiac disease, and if time permitted I could give from my own experience numerous other examples.

F.—Highly Complicated Conditions.

I have already given examples of combined chest conditions of a complicated nature, and I merely remark further that exceptionally they present such a degree of complexity, that it becomes practically impossible to unravel them, apparently every structure connected with the thorax, both internally and externally, being more or less implicated in the morbid changes, and ultimately becoming either agglutinated and matted together into one mass or involved in a common ruin. Some highly complicated cases, however, can be fairly understood, even when several structures are affected.

Permit me, before bringing this lecture to a close, to submit the following general conclusions: (1) That chronic diseases of the chest, even of individual structures or organs, to which we apply particular names, are in reality usually made up of different morbid conditions in various combinations; (2) that two or more directly related structures are frequently implicated, and present well-recognised associated lesions in cases which are thus designated; (3) that definite and well-understood pathological relations exist between the important organs occupying the thoracic cavity, which explain many of the combinations of morbid conditions met with in medical practice, but also that these, and the structures associated with them, may be implicated together, apart from the effects of any such obvious relations; (4) that certain classes of cases must be dealt with specially and individually, as regards the morbid combinations which they are likely to produce; (5) that we must be prepared for cases in which separate and independent diseases exist together, as well as for those in which the changes are of a highly complicated nature, and which may tax our knowledge and skill to the utmost in our attempts to unravel them; and (6) that in all cases of chronic thoracic disease due attention and consideration must be given to the chest walls, and that in not a few instances, at any rate, the diaphragm ought not to be forgotten or overlooked.

An Address
ON
EXPERIMENTAL CRANIOTOMY AND DIAGNOSIS OF CEREBRAL ABSCESS.

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Delivered on Nov. 30th, 1894, before the Lombard Medical Association, and specially reported and translated for THE LANCET.

(Continued from page 84.)

LAST April a man aged thirty-three years, who for five months had been suffering horribly from headache, was admitted to the medical clinic. The pain was so great as to prevent sleep, forcing him to rise at night and even to throw himself upon the ground with agony. These phenomena had increased, but for nearly five months had not led to the slightest anomaly in the function of the brain. Only twelve days before admission the patient had one evening been seized with an attack of vomiting, which was repeated four consecutive days, always after a meal. Notwithstanding all this, he was still able to rise from his bed; but for about a week this, too, had become impossible. At the same time his family noticed that when left alone he fell into a slight delirium, and that for four days his face flushed suddenly every now and again. In spite of this, the physician who attended him at the time found no fever. Consciousness grew less and less acute, till at last the patient could no longer speak in spite of his efforts to do so. His right eye remained half closed; at times attacks of coughing and hiccoughing seized him; and finally, on sinking into coma, the patient was removed to the clinic, where he survived only one day. In this case slight ptosis on the right side was noticed, deviation of the eyeballs towards the right, and occasionally horizontal nystagmus. There were no contractions of the muscles of the neck, but those of the trunk, and especially of the chest, were contracted, and the muscles of the upper limbs were in a state of increased tonic spasm. The mental condition, which was very serious, did not allow any really voluntary movements or permit any control over the different senses; only in the upper limbs a few spontaneous movements were to be seen; there were fibrillary twitchings and occasional clonic spasms everywhere. The plantar reflexes were very difficult to get, those of the cremasters and of the abdomen were altogether absent; the tendon reflexes were everywhere slightly exaggerated; there was increased mechanical excitability of the muscles; the reflex action of the conjunctivæ and pupils was wanting. There was pronounced exophthalmos in both eyes, especially in the right. An ophthalmoscopic examination showed perfectly normal conditions. The breathing was a little irregular; rhythmic pulse; the temperature was 37·6° C.; the respiration was 20, and the pulse 120 to the minute; the urine was normal; slight râles were audible in the lower and hinder parts of the thorax; there was nothing abnormal in the other viscera. What was the cause of these serious symptoms? The patient showed signs of tuberculous disease of bone, a cicatrix adhering to the bone of the right leg, the remains of a sinus which had lasted several years; another sinus was still open in the right forearm, which, having opened spontaneously, maintained a continual flow of pus; all round was diffused swelling, due to periostitis. Certainly, therefore, the idea of tuberculous meningit's appeared in sufficient accord with the preceding and coexisting facts; but other facts did not so easily agree with it. There are morbid processes which will ever be the despair of writers on disease; one of these is tuberculous meningitis. Imagine a complicated organ like the brain, a variable disease like that produced by Koch's bacillus, and tell me if it is possible to lay down any rules sufficiently probable for the infinite ways in which these two agents acting together may give shape to their results. Naturally they will be varied by the duration, situation, and extent of the tuberculous deposit, by meningitis and reactive encephalitis, by the previous constitution of the patient, by the excitability of his nervous system, and by the absence or coexistence of similar or different conditions in other organs. But one of the most assured facts is fever. The presence of tubercles in the choroid is very important, but although

diligently and repeatedly searched for in this patient they were not discovered. Another fact of less importance but not of slight value is the length of the illness. All who have observed this disease have seen it take its whole course in a few weeks; it is exceptional if the patient does not die in a month. Nor is this difficult to understand; it is enough to recall the devastating action of Koch's bacillus and the importance of the organ affected. Now in the case under discussion there was no fever—at least, the physician never discovered it,—although the beginning of the illness could be traced back five months. Kraemer[1] refers to a case which lasted four months, and speaks of those of Seitz of forty-two and fifty-four days' duration; Gatti of Milan observed one lasting seventy-nine days; Dickinson noted one of eight months' duration. I myself have seen a case lasting even longer than this, but in it between the beginning and end of the disease there intervened a long period of apparent recovery. The patient was a girl aged seventeen years, whom I, having made the diagnosis of tuberculous meningitis, did not permit to leave the clinic notwithstanding her evident return to health. She remained there for several months, willingly occupying herself in various little duties belonging to the nurses, but was once more seized with serious cerebral symptoms, and finally died. The post-mortem examination entirely confirmed the diagnosis of tuberculous meningitis. In the patient, however, whose history I gave above it was difficult to explain so long a duration, seeing that there had been no interval of apparent recovery; but that, on the contrary, the symptoms had been continuous and progressive. Persuaded of the infinite variety in the disease, I did not exclude the possibility of tuberculous meningitis in that case, but declared, nevertheless, that I inclined rather to the following diagnosis: caries of the base of the skull; pachymeningitis, with an extra-dural abscess compressing the posterior part of the right cerebral peduncle and the anterior part of the right side of the pons. The pain, which had been so great and continuous without any other phenomena, seemed to me to be best explained by this affection of bone and by pachymeningitis: the sudden nature of the final symptoms were signs of the spreading of the meningitis; the right ptosis, the very evident deviation of the eye, the nystagmus, &c. all justified the diagnosis of lesion of the peduncle and pons, occasioned by compression from below. The post-mortem examination showed that this diagnosis was right as regarded the seat of the disease but wrong as regarded its nature. The skull bones were perfectly normal and the dura mater scarcely thickened. There had been tuberculous meningitis, not an abscess. The convolutions were sunken and the fissures nearly obliterated. In the posterior cranial fossa was found a turbid yellowish liquid. The pia mater was everywhere injected, thickened, and opaque; there were evidences of grey and yellow tubercles in the left motor area and in the parietal lobe of the same side. The sides of the fissure of Sylvius were very adherent, and the middle cerebral arteries—especially the right one—were buried in false membrane and yellow tubercles. The great longitudinal fissure was also obliterated in its anterior part. On the base, from the posterior part of the chiasma to the front of the pons, was found abundant exudation, and the corresponding parts of the brain were covered by pseudo-membrane lying more to the right than the left. The third and fourth ventricles were dilated and full of a turbid liquid, but not the lateral ventricles. The brain tissue was softened in the posterior part of the corpus callosum and in the posterior and anterior parts of the left optic thalamus. The right cerebral peduncle was also softened, while the left had remained normal; the locus niger was more marked on the left. In the pons the base was inclined obliquely from the right to the left from above downwards; the upper right half of the pons had shrunk as though crushed, and presented on its lower side a dark clot as large as a small lentil. On cutting through the pons it was found that the tissue on the right was of a dark colour, while on the left it was of a pale red; the consistence was less on the right, although the softening appeared less general here than in the posterior part of the right peduncle.

In some cases it becomes impossible to distinguish between tuberculous meningitis and cerebral abscess, for if the observations of Fränkel and Rendu be accurate it would seem that Koch's bacillus is enough to generate a cerebral abscess. A man thirty-four years of age died in my clinic in whom three cerebral abscesses of quite recent date were found, one in the genu of the corpus callosum, the other two in the white masses of the two hemispheres. Neither by post-mortem examination nor by the past history could any reason be found for them; but the cerebral meninges of the pia mater gave evidence of a quantity of recent tubercles. But beyond this it is well known that the usual tuberculous deposit in the brain is seldom found surrounded by suppurating brain substance. I therefore firmly believe that between caries of the cranial bones and cerebral abscess there exists a decided causal relation, and that there is the same relation between the suppuration of the tissues which surround the cranium and cerebral abscess. But I admit that between this theoretical decision and the clinical proof which may have verified it in an actual case there is a great gulf. In practice it is often difficult, not to say impossible, to decide whether there has been a cause or not; but even after having ascertained this it is not fair to argue the existence of the effect, seeing that the same causes may lead to so many different effects; caries of the bone may cause either an abscess, meningitis, thrombosis of a sinus or tuberculosis, or, on the other hand, none of these; an injury may produce abscess, tumour, traumatic neurosis, or, again, none of these. Those who write on pathology, therefore, delude themselves; etiological criticism is, without doubt, very important in the diagnosis of an abscess, but one must confess that it is also very dangerous. What symptomatic difference of importance can be found between the case I have narrated and the one I am about to give? I leave you to judge.

On Aug. 16th, 1890, a man thirty-five years of age was admitted to the clinic. He was in a state of half-delirium, half-stupor, so that little could be taken for granted in the answers he made; but his wife when pressed assured us that the man had never suffered from ill health. It was only in the beginning of that month that he complained of headache, which soon became so intense that after Aug 7th he could no longer leave his bed. When he tried to do so he found that he had not the strength. His mental condition, which from the beginning had been abnormally irritable, rapidly grew duller. The night before his admission into the clinic slight delirium and a very slight stupor had appeared for the first time. The man was well nourished, and showed, besides the delirium and somnolence, a few muscular spasms, and gave vent occasionally to cries of pain caused by the headache, but he had little fever. At the physical examination the next day his mental condition impeded any accurate study of the eyes. The pupils were equal, but reacted slowly. The tongue deviated towards the left. Sensation was dull everywhere. Spasms and contractions occurred in all the limbs. The pulse was 66 and the respiration 20 to the minute. The stupor did not, however, remain always the same; in the following days he sometimes answered promptly. The spasms continued even during sleep. On Aug. 22nd dilatation of the left pupil was noticed; on the 23rd there were contractions of the muscles at the back of the neck, ptosis of the right side, and deviation of the eyes and head to the right. Reflex action was normal everywhere, general sensation was obtuse and the sense of smell quite gone. On the 25th convergent strabismus on the left from paresis of the external rectus set in; the left eyeball was painful, and there were dilatation of both pupils, paresis of the facial muscles on the left, and inability to protrude the tongue. On the 27th paresis of the left side set in; the perception of pain was very slow, but the muscular sense of the position of the limbs was fairly good. The pulse remained regular. Nystagmus of the left eye and a tonic spasm of the right arm, with flexion of the forearm upon the arm and of the hand upon the forearm, were present. Reflex action of the cornea and conjunctiva of the left eye was slow and weak, while the right continued normal; the movements of the left eye were very weak, those of the right eye were very quick. The abdomen was sunken, with an occasional loose motion; deglutition grew gradually more difficult owing to defect of the reflex action in the pharynx. The headache continued intense, while, on the other hand, the stupor grew daily deeper, until by Sept. 12th it had reached the degree of absolute coma. The pulse rose to 120-130 beats to the minute, the breathing to 24-28; the temperature reached and went above 39° C. several times. He was almost always feverish, with the exception of two periods (from Aug. 25th to 29th and from Sept. 3rd to 11th) in which he remained at 37°. The facts given with regard to the nervous system persisted steadily, until on Sept. 14th the man died.

Whoever in this case had chosen to make a diagnosis of basal meningitis would certainly have had no less reason than

[1] Ueber Meningitis Tuberculosa. Inaugurale Dissertation. Zürich, 1894.

one who made the same diagnosis in the preceding case; indeed, in the last the case had been shorter and the difficulty of the long duration was less; besides, there was fever, alternated with periods of apyrexia, which are frequent in cases of tuberculous meningitis. It is true there existed no disease of the bone, as had existed in the preceding case, but who can deem himself free from any old caseous process of the mesenteric or intra-thoracic glands? As in the preceding case, there was no tuberculosis of any organ here; in this case, as in the other, a number of nervous symptoms existed which coincided very decidedly with an extensive process at the base of the cranium—paresis in the left limbs, spasms, starting and contractions in the right limbs, ptosis in the right eye, paresis of the left external rectus, anæsthesia of the olfactory nerves, diminished sensation of the trigeminus and pain in its branches, nystagmus, permanent deviation of the eyes and head, paresis of the hypoglossal, beginning on the left, and symptoms of cerebral compression increasing hourly. Nevertheless, all the meninges were everywhere normal. The origin of the symptoms was one, no, three, cerebral abscesses, one as small as a pin's head on the anterior right side of the pons, in the vicinity of the nucleus of the sixth nerve; another, also small and easily enucleable, as large as a nut, in the anterior part of the left temporal lobe. The largest of them occupied part of the optic thalamus, the internal capsule, and the lenticular nucleus of the right hemisphere, but without breaking through the ventricular surface. This abscess was coated with a pseudo-membrane of considerable resistance, was of a winding form, as large as a fowl's egg, and contained an inodorous, greenish pus of the consistence of syrup. It had caused great compression beneath; indeed, an examination of the corpus callosum showed at the junction of the anterior and the median third a roundish prominence, which penetrated the right hemisphere and fluctuated. Studying the lower surface of the brain, the hippocampal gyrus was noticeably displaced by a marked prominence, something like a bud, of the inter-peduncular space and the right cerebral peduncle. The right optic tract was compressed and presented the appearance of a ribbon, as also were the third, fourth, and sixth nerves of the right side; the chiasma and the left cerebral peduncle were compressed and displaced to the left; the right anterior half of the pons was also compressed, and the third ventricle and the right lateral ventricle crushed and almost obliterated. What had been the cause of these abscesses? Just as the past history had yielded no explanation, neither did the necropsy. An examination of the viscera showed nothing abnormal in them. The bones of the cranium seemed to be sound, and the questions which had been asked during the life of the patient had allowed of no suspicion of trauma in the head. The temporal bones, with their contained auditory apparatus, were removed, but the most diligent search showed no alteration in them. Were these, perhaps, idiopathic abscesses? The question may be attractive in theory, although, even thus considered, it appears difficult. Who in these days can declare that the brain suppurates without any sepsis having set in? And who will deny that Martius was right in holding that these provocations to suppuration arise in the depths of the encephalic mass, running through the most delicate paths of the circulation? But for the purposes of diagnosis this solution is not sufficient; it is a certain fact that abscesses of the brain are often found of which the sources and causes cannot be discovered during life, or even after death; so that the principal foundation of diagnosis is entirely lacking in these cases, which nevertheless, according to Gowers' statistics, represent the sixth part of the whole. If in such cases, as often occurs, even fever is absent, what is practically left to prove the nature of the disease? Sometimes the course of the illness, but even this criterion, although the best, is often dangerous. Twice I myself have erred in following it: once I made the diagnosis of tumour and found an abscess; another time I imagined an abscess and there was none. I know that the description of so many cases is annoying, but facts are always more satisfactory than precepts, so you must permit me to recount them as briefly as I can.

One day I was called to a consultation near Bologna, and found a patient already under the care of two young and extremely clever colleagues of mine. At first they had suspected the illness to be sciatica, but had not been able to decide whether it was peripheral or central. The patient was a strong man twenty-nine years of age in the habit of travelling from fair to fair on matters of business. It was during a fair, to which he had gone on foot, that he declared he had been taken ill; that suddenly the left leg had grown so weak that he was obliged to clirg to something firm for support, after which the lower limb had become painful both in itself and to the touch. But the patient, intent upon his sale, did not take much notice of his health. When I visited him I soon observed that the muscles of the lower part of the left side of the face were slightly weak, and neither I nor my colleagues felt much doubt that the pain and weakness of the left limb did not arise from the peripheral nerves or from the spinal cord, but from the brain. Until now, however, this last appeared in a perfectly normal state. I hazarded the possibility of cerebral tumour, and it was decided that the man should be removed to the Bologna clinic. I have recalled these particulars in order to demonstrate how misleading the beginning of cerebral disease may be. On Dec. 15th, 1892 he was admitted to the clinic. There his past life was thoroughly inquired into, but nothing could be learned beyond that he had once suffered from gonorrhœa, from an intermittent fever, which had long left him, and from an attack of influenza which had some years previously troubled him, but which had been cured some time ago. Of actual disease nothing, absolutely nothing, could be noticed. But patient and oft-repeated interrogations at last elicited the fact that during the last three days in November he had experienced a pain in the right side of his head and a certain sense of fatigue. These symptoms continued until, on the morning of Dec. 6th, he noticed that his legs were weak. Nevertheless, he left the house and went to the market on foot, and it was there that suddenly an indefinable discomfort came over him and he felt his legs giving way beneath him. Being, however, in full possession of his senses, he sought support against the shoulder of an ox and made signs to the first cabman who passed to take him home. He said that when he had reached home and sat down he felt his left leg become straight and rigid, and he noticed certain movements in the toes of the foot. Having called in a physician, he was ordered a plaster upon the thigh, probably on account of the pain of which he complained. All the movements of the left lower limb seemed weakened. This painful paresis of the left lower limb grew so much worse that the patient could scarcely leave his bed, and some days after the left upper limb began to show signs of weakness. The slight headache continued and became for the most part frontal. Consciousness was still intact, although the man appeared to be a little apathetic. An examination showed a flaccid hemiplegia on the left. The loss of voluntary motion was complete. The patient rested constantly upon the right leg, and the eyes and head evinced a slight deviation to the right, which lasted to the end. The arch of the left eyebrow was higher than the right, and the skin of the right eyelid was more drawn than that of the left. There was weakening of sensation and of sensibility to pain on the whole of the left side, while the muscular power was also weakened. On the left there was loss of cremasteric and abdominal reflexes, the plantar reflex was weaker than on the right, and the knee-jerk and tendo Achillis reflex were stronger. The pupils were of ordinary size, but reaction was slow; the sight was almost normal, but the motion of the eyeballs less free, especially on the left. The optic papillæ were red, turbid, slightly raised, with indistinct outlines. In the retina around the disc was a greyish turbidity, which extended also to the papillæ and obstructed the view of the course of their vessels. The veins were swollen and tortuous and the arteries thin. These alterations were more marked on the left than on the right. Acuteness of sight was well preserved, but the sense of taste was confused all over the tongue. Hearing and smell appeared normal; normal also were the urine, pulse, respiration, and temperature. An examination of all the viscera was negative. The condition of the patient grew rapidly worse, and a certain degree of stupor and apathy, which had existed from the very first, became so much more marked that several times he passed his motions in bed either from not being in time to call or from a desire not to be disturbed. He ate little and never had any attacks of vomiting. His only complaint was the headache. On the morning of Dec. 21st he sank into coma and towards the evening died. The temperature, which had been normal until that morning, rose rapidly to 39·9° C. (103·8° F.) at the moment of death, and the pulse and respiration became at the same time very frequent. Beyond this no new symptom preceded death.

I had confirmed my former suspicion of cerebral tumour since he had been in the clinic, and had localised it in the right centrum ovale, with successive invasion of the optic thalamus and corpus striatum and compression of the internal capsule. The absence of any signs of irritation had excluded the idea of its location being in the cortex, and the absence of all paralysis during a certain period of the illness did not lead me to suspect the internal capsule as the original seat of the morbid process. The rapid and complete implication of the fibres in the internal capsule obliged me to believe that this morbid process, not having originated with them, could not be far off, since it had so quickly reached and invaded them. The sciatic pain in the beginning and the succeeding persistent diminution of sensation made me fix upon the optic thalamus and its surroundings as the seat of it. And in point of fact these diagnostic indications led me comparatively right with regard to the seat of the disease, but the diagnosis of its nature was wrong. In the right hemisphere of the brain a considerable softening, corresponding with the upper parietal convolution, was noticed. On separating the hemispheres the inner surface of the convolution of the corpus callosum of the right side was remarked to protrude like a sac, which was yellowish green in colour and contained a large quantity of very fetid, yellowish-green pus. Making an incision into this convolution an abscess cavity was found of the length of from 5 to 6 centimetres and width of from 2 to 3 centimetres, which included the grey substance of the convolution. This cavity was lined with a dark, hard, easily enucleated membrane, and the layer around it was softened and showed upon its surface innumerable minute red spots. This cavity communicated with another abscess, of the same size and aspect, situated nearer to the centrum ovale, but not involving the grey substance. This one ran underneath and behind the fibres coming from the upper parietal convolution, and passed beneath those coming from the paracentral lobule, terminating at the foot of the first frontal convolution. The right corpus striatum was softened and a little compressed from above downwards, as was also the corresponding optic thalamus, the upper side of which was concave, while the inner was perpendicular, so that the two sides formed a right angle. Looked at from above it had a triangular form, and its substance was very vascular. The grey layer of the right hemisphere was so faded as scarcely to be distinguishable from the white. The left hemisphere appeared to be normal, as were also the vessels, the meninges, and the bones of the cranium, including the petro-mastoid of the right temporal, which was particularly examined. Every sign or symptom had been lacking during life which might have led to the discovery of this great cerebral abscess; there had never been fever, and none of the well-known causes of suppuration of the brain had preceded it. Even after the necropsy had been made the doubt as to the origin still remained; it was certainly not a traumatic abscess, nor a carious one, nor one arising from suppurative otitis. Could the influenza be blamed? The position of the abscess and the fact of its being double were characters favourable to the hypothesis of a pulmonary origin, but even so, what explanation could be given in the clinic of these diseases which are to be met with every day and every moment and which are not followed by abscess? The explanation at the best might serve the purpose of the pathologist after the examination of the body, but for the physician who must diagnose before the necropsy the idea is utterly worthless. Certain it is that death intervened sooner than is usual in the case of tumours, but there are tumours, especially infiltrating sarcomata, which rapidly cause such intense compression that death comes through excess of intra-cranial tension. In fact, the cause of the patient's death was none other than a rapid increase of this tension. The abscesses had been there for some time, as was shown by their thick, hard capsules. In less than twenty-five days, during which the patient had complained of pain, the pseudo-membrane might have been formed, but the capsule could scarcely have attained such thickness or such resistance. Before that time the patient had never noticed that anything was wrong with his head. Perhaps a slow extension had at last caused the communication of the two abscesses, after which the growing activity of the membrane had brought about an increase of the liquid contained in the two cavities, until the right hemisphere, and especially the optic thalamus, had been violently compressed. A sarcoma or glioma of rapid growth might easily have caused the same physical effect. Therefore I ask, What signs could the physician bring to the solution? The causes? they were not known. Fever? there had never been any. Optic neuritis? it had been verified, but if its presence were not unfavourable to the abscess it is certain that it was not favourable, since it seemed to have arisen very quickly. And still this helplessness of diagnosis before the post-mortem examination, which showed that a surgeon's work might have saved a young and vigorous life, does not suffice to bring to a physician the calmness of resignation. But so long as surgeons, ignorant of the real conditions of diagnosis, deluded by the few and hazardous diagnostic successes related in contemporary literature, presume to act alone, or insist that an accurate diagnosis be given them before they will offer their help to sufferers from cerebral abscess, many lives must be sacrificed before their time, seeing that physicians and surgeons not deluded by scientific appearances, but severely instructed by facts in the clinic, can rarely feel sure of a diagnosis of chronic abscess of the brain, and may not propose or accept the intervention of the surgeon until all adverse signs and symptoms have been overcome. Decidedly the position of exploratory craniotomy is far more unfortunate than that of exploratory laparotomy once was. The cases are much rarer, the teaching of experience therefore much slower, the victories less apparent, and the mistakes serious and endless. I am the first to recognise that he who makes a diagnosis and he who operates lose much in the esteem of the public when the faulty judgment has led to a useless operation; but no man of worth, upheld by the feeling of duty, will be alarmed at consequences which the want of practical knowledge fully excuses.

In the meantime, in order to learn more we must lay to mind our mistakes. To gain knowledge by so thorny a path (who will not admit it?) is unpleasing, but how shall we evade it? Every mistaken diagnosis is a beneficent correction. It would be well if each of us would in charity give the results of his individual experience. This clinical art of ours, which looks so easy to him who surveys it from within the walls of a laboratory, becomes instead very difficult when one enters the hospital. I have spoken above of the deficiency of etiological criterion for the diagnosis of cerebral abscess. I have also remarked that often fever means little to the physician, but without these two things a reasonable foundation for suspecting abscess becomes impossible. Such was the case in the present instance, the cause (probably of long standing) of the formation of the two abscesses had been unsuspected by the patient and undivulged by the past history—only the last phenomena of the deepening and increase of tension of the two abscesses had produced any impression on the consciousness of the patient. In similar cases, when of all the drama enacted nothing but the last scene is represented, how will it be possible to realise all the long and serious processes taking place before it? Will it be possible to infer from the final solution, not only the existence, but the kind of changes that in latent form were preparing this last and only change which was observable? It is certain that the rapid course of the symptoms observed in this case might as well have been attributed to sarcoma or infiltrating glio-sarcoma, but at the same time it did not exclude the possibility of an entirely latent abscess, seeing that science is able to show a few such cases. Hirt ascribes to the abscess the property of causing hemiplegia little by little and not all at once, and so it happened here. But a large tumour of the temporal lobe of the centrum ovale may compromise and paralyse the crural, brachial, or facial tract successively and produce the same hemiparesis or hemiplegia. Granted that on account of these symptoms one has harboured the idea of an abscess, only exploratory craniotomy could possibly verify it. The probability of diagnostic error is not limited only to the confusing of these cases with a tumour of rapid growth; it can extend even to meningitis and cerebral hæmorrhage. What is more, this confusion does not only occur when the last stage is not preceded by some absolute sign, but is incurred even when the end has been preceded by some suspicious symptom. These causes have often lasted a long while, till suddenly some softening, some inflammation in the surrounding parts, or more probably the breaking of the abscess into the ventricles or on the surface of the brain, causes a tempestuous onset of symptoms, followed by death.

On Dec. 3rd, 1892, a girl seventeen years of age was admitted to the clinic. She was a peasant who for four years had been in the service of a family in Bologna. She was born of healthy parents and had a tolerably strong constitution. She spoke little and with reluctance, but her relatives and employers furnished us with the following facts.

As a child she had suffered from measles, and once, when about three years of age, she had a fall which had caused a scalp wound, the precise nature and position of which were not remembered; but neither the measles nor this wound had left any lasting effects. The girl had enjoyed good health until about a year back, when she had an attack of diphtheria which left her weak and pale. A visit to the country and sea baths had taken away all signs of this affection. Nevertheless, she continued to be pale, suffered a little from the stomach, and was subject to a headache which for some years had been slight and infrequent, but which after the diphtheria had grown so intense as to burden the life of the poor girl. She had only had fever once, the cause and length of which could no longer be remembered, but which the patient declared to have been very high; but everyone agreed in affirming that for a month the troubles of head and stomach had increased and that the girl was weaker. Fifteen days before entering the clinic she had consulted a medical man, who noted gastric disorders with frequent eructations, sweats, coated tongue, and bad headache. He prescribed Carlsbad water, and four days later saw the patient and confirmed his first opinion of gastric catarrh, but the treatment did no good. Six days before her entrance into the clinic she, while mounting the stairs, had been taken with a giddiness which made her feel as though she would drop the baby she was carrying. The next evening, while carrying some bread to be baked, she suddenly felt so ill that she was obliged to return home and go to bed. The headache persisted, two days later vomiting began, and the evening before entering the clinic those in attendance on the girl noticed that her skin was dry and burning. The next morning fever had ceased; the medical man came and was much struck by her deathly paleness. He advised her removal to the hospital. The most salient points noticed by us were: extreme pallor of the skin and mucous membranes, much subcutaneous adipose tissue, and extraordinary frequency of breathing, equal to the pulse, 100 or 110 to the minute. This, however, ceased and went down to 18–20 to the minute during sleep or when the patient was left long alone and tranquil. Nothing abnormal was noticed in the thoracic and abdominal organs. The patient was taciturn, seemed determined to be silent, and lay almost always with her eyes shut or with the bedclothes drawn up so as to keep out the light and screen herself from inquisitive eyes. She complained of violent pain all over her. All movements were possible to her, but were slow and wanting in energy. The superficial reflexes were weak. Those of the tendons of the knee and arm were, however, normal. The pupils were equal and reacted to light, but were slightly contracted. The vaso-motor reflexes were normal. An examination of the different senses revealed nothing, as the patient refused to coöperate, but what could be seen of them was normal, as also was the sense of touch and heat. The patient appeared to understand even whispered words; her sight was good and in the retina nothing was noticeable but great pallor; the outlines of the papillæ were distinct. From the way in which the patient behaved towards her relatives it was evident that she was fully conscious, while her words showed that she understood well and could answer clearly. The examination of the blood showed red corpuscles 2,808,000 and white corpuscles 446 in the cubic millimetre. An analysis of the urine presented no anomaly. For two days the girl lay quiet, slept well, and ate without vomiting or delirium; but on Dec. 5th she was seized with clonic movements of the arms and part of the face; the lower limbs were not convulsed and consciousness was lost. The convulsive movements lasted only a few minutes, but she did not recover consciousness for nearly an hour. The following days were without incident. She was taciturn, drowsy, tormented with bad headache, and had a temperature always between 37·8° C. (100° F.) and 38·2° C. (100·8° F.); pulse and breathing very abnormal, as had been observed at first. She was tolerably conscious. On the evening of Dec. 9th the patient, as usual, had had her supper, had sat up in the bed, and had exchanged a few perfectly connected words with the nurse. But less than an hour later she was seized with an attack of convulsions, which began with a cry, then clonic distortions of the right side of the face, whence the convulsion extended to the right upper limb, to the left side of the face, and lastly to the left upper limb and to the lower limbs. The eyes deviated to the right. The convulsion, once become general, assumed the form of tonic and clonic contractions. The head was turned alternately to the right and left. The mouth was full of froth, the lips became blue, and the skin was covered with perspiration. After a few minutes the convulsion ceased, but very soon began again. Between two attacks there was an interval of ten minutes, and this state of things lasted from eight in the evening till midnight. During the intervals tracheal râles began to be heard. Consciousness, which had still been present during the first attacks, grew slowly dimmer, until at last it was entirely lost. At midnight the attacks grew yet more frequent, but later diminished again, with intervals of fifteen minutes, until 3.45 A.M. on Dec. 10th, at which hour the patient died. In this last phase of convulsions the pulse never rose higher than 116 during the minute and the breathing stopped now and then during the convulsion, while in the intervals it was 28 to the minute. An ophthalmoscopic examination being made during one of these intervals showed no change, with the exception of a little inflammation of the centre of the papillæ. Five hours before death the temperature marked 37·6° C. (99·8° F.). This strange series of facts was decidedly not easy of explanation. Nevertheless, the violent headache which had lasted a year, the giddiness and sudden falling experienced a week before, and the stormy scene which had so tragically closed her life did not allow of any suspicion of a common vascular lesion (hæmorrhage, embolus, thrombosis). Even for meningitis there was no valid argument; nothing in the pulse, no delirium, no contraction of muscles, not even a sign of peripheral invasion of the cranial nerves; on the one hand, some insignificant premonitory symptoms of remote date, on the other, an incomprehensibly rapid and stormy end. It seemed more probable to imagine a tumour almost latent for an indefinite period, which had suddenly been followed by a period of rapid vascular overgrowth, and finally internal hæmorrhage within the new growth. Yet the slight fever which had been noticed, the absence of every intimation of the locality, and above all the absolute integrity and indeed pallor of the papillæ rendered such an hypothesis improbable. The idea most in accordance with facts was that of a chronic abscess. The reason for this probably lies in the fact that there is no limit to the course taken by an abscess—from one or two days to twenty years, from absolute latency to the most serious and decided manifestation. The violent headache dated from the diphtheria; had the wound of the head made during childhood perhaps left one of those encapsuled abscesses which seem to be healed? And even if this hypothesis is not accepted, why should we not have recourse to another process, certainly rare, but nevertheless ascertained as possible—a process of infection by the nasal mucous membrane? The headache, the anæmia, might be due to some febrile abscess of unknown origin which had for a year produced the symptoms of a semi-latent abscess; after which a period of renewed activity had come, and the giddiness, vomiting, increased anæmia, loss of strength, increase of headache, slight fever, the first access of convulsions, stupor, and diminution of mental powers were all explained by inflammatory œdema, and the softening of the cerebral tissue around the abscess. Then at last the work of expansion, conquering the weakened resistance of the surrounding tissues, overcame the last barrier and the pus flooded the ventricles; from this had arisen the uninterrupted epileptoid fits, followed by coma and death. Keeping in mind the constant lack of phenomena from a central infection and the frequency with which the latent or semi-latent chronic abscess is found in the temporal lobe, and remembering also the fact of the convulsions being on the right, I made this diagnosis: "chronic abscess of the left temporal lobe." On opening the cranium nothing was noticed in the bones, nothing in the dura mater; the pia mater was moist and transparent, and the veins injected. The superior longitudinal sinus contained two soft clots. The hemispheres were normal in size, in depths of sulci and in convolutions; but in the left hemisphere, behind the first and second temporal convolutions—that is to say, in the convolutions leading to the second and third occipital convolutions—there was discovered a prominence of reddish hue, soft, and covered with dark spots. Cutting open the brain this zone appeared larger than a nut; it had a yellowish-green colour, and was marked with innumerable dark-red spots of various sizes, surrounded by a paler greyish-red substance. The delimitation of this zone from the rest of the cerebral matter was not well marked, but died off by degrees with the progressive diminution of the spots; the œdema, hyperæmia, and the swelling of the cerebral matter extended very noticeably to the surrounding tissues, but

there was no hydrocephalus. On the surface of the temporal lobe was a large vein quite thrombosed, into which there entered two other veins, also with clots, one in the front, coming from the limiting convolutions of the Sylvian fissure, and the other coming from the occipital lobe. All the smaller branches in these veins also showed signs of thrombus. The thrombi were red, without any sign of organisation. The examination of the walls of the veins and of the sinus showed nothing unusual. Of the numberless hæmorrhages the most noticeable scarcely reached the size of a millet seed. They were very close to one another, oval or round in shape, of recent growth, and spread over all the grey layer. The lymphatic perivascular spaces were as a rule larger than usual, and no sign of leucocytes could be found in them. The nerve cells, with nuclei of good colour, seemed atrophied. This atrophy was very noticeable, especially in places, yet nowhere were the cells quite obliterated. The neuroglia presented a granular aspect, and here and there a certain cracking was noticed in the cells, a tendency to form vacuoles. There was no sign of small-celled infiltration either in the grey or the white matter. The rest of the brain was normal. It was not possible to open the cavity of the thorax and abdomen, but examination made during life had shown tolerably well that there could be no important lesion. Pathologically, therefore, the case stood thus — grave chlorosis with chlorotic thrombus of the left lateral sinus and of the cerebral veins. It was utterly impossible to decide which had been the first to coagulate, the blood of the sinus or of the veins, since the thrombus everywhere appeared to be of recent date and with no appreciable differences.

That the blood of chlorotic persons has a tendency to coagulate is well known from many observations; but, as a rule, the thrombosis shows itself in the lower limbs. Skerritt, in a discussion held in 1885 at the Clinical Society of London, affirmed that he had also seen chlorotic thrombus in the cerebral arteries. The first detailed statement made with regard to the chlorotic thrombus in a sinus[2] was Professor Bollinger's. His publication was more anatomical than clinical, since the girl he studied had apparently not attracted much attention during life. I learned later, from a kind personal communication from my cultured colleague at Monaco, that after this case he had been able to observe others which he will later publish. Bollinger's hypothesis, which attributes the coagulation of the blood to the fatty degeneration of the endothelium of the sinus, we could not ourselves confirm, notwithstanding the fact that we directed our attention to it. Not long ago Kochel was able to gather about half a dozen cases of chlorotic thrombosis of the cerebral sinuses.[3] Looking over the history of my patient, one can affirm that the change from a country life to that of a city life was for her, as it is for many like her, who have to go into service, the first cause of a slight chlorosis, which after the diphtheria grew worse. Notwithstanding the transitory benefit gained by the life in the country and at the seaside during the summer season the illness grew worse again, and owing to the fatigue and deficiency of sleep which these poor girls often have to undergo the chlorosis became serious, was followed by giddiness, faintness, loss of strength, increased headache, and finally by clotting, and with it œdema, turgescence, and the softening of the cerebral substance; after which ensued stupor, slight fever, difficult breathing, slow cerebration, convulsions, coma, and death. Yet before the necropsy how probable had seemed that suspicion of semi-latent abscess which broke at last into the left lateral ventricle; and after the necropsy how easy it is to conceive how those two unusually large abscesses in the previous case arose, and how they grew and existed in spite of the brain being apparently completely unaffected.

Here we have a phenomenon by no means new in nature—that which is, appears not to be, and what is false has the appearance of truth. This phenomenon reveals the state of ignorance under which we still labour with respect to the determining conditions of symptoms of cerebral disease. It is not enough, in picturing the brain to ourselves, to compare it to a keyboard as I have done above, the keys of which give out the same sound whatever the blow be which they receive; it must be added that the instrument is of so delicate a nature that the striking of a key not only produces its own sound—direct phenomena,—but can also put the other keys into vibration—indirect phenomena,—just as happens in a harp when given a sharp blow. Indeed this resonating vibration occurs even when the only key touched corresponds with a cord which has no sound (cerebral area of unknown function). From which fact it results that the vibrations of all the strings are often repeated, are very much alike, and are often the most important phenomena, not to say the only ones. Now, since from any key sufficient impulse can come to put all the other cords in vibration, the inference as to which key was struck is very difficult and not rarely impossible. I admit that this is not scientific language, but the simile is useful in such an argument to avert controversy, into which we might be led by the desire to establish the mechanism which determines the uniformity of clinical manifestations in different endocranial processes, or the diversity of these same manifestations in identical processes. Certainly one of the most important elements for the generation of cerebral symptoms is the mechanical process of compression, which may be caused in one part of the intracranial contents by a collection of pus or accumulations of blood or lymph, and in another by the growth in number and volume of cells and fibres, or the development of aneurysms or parasites. There is always one consequence, and it is this: In the limited space within the bones of the skull the pressure must be increased, a fact which will be felt all through the brain, but especially in the adjacent area and less resistant parts, such as the lymphatic sheaths and the cerebral ventricles. Consequently the blood will be at greater tension in the capillaries of the brain, the veins will become turgid and tortuous, and the lymph will break through its walls and distend the cavities of the brain. It is enough to remember the fine sensibility which distinguishes the cerebral tissue with regard to circulatory changes, to understand how this mechanical process must bring with it many analogous disorders of the brain notwithstanding the difference of the morbid processes. But it is enough also to compare the enormous compression observed in the patient's brain in the previous case with the slight degree noticed in the present one, to be convinced that the mechanical element is by no means the only cause of indirect symptoms. And as the other elements are more doubtful I have preferred to use the allegory to show the synthetic fact of the very frequent and uniform participation of the whole brain in lesions evidently limited to only a part of it. Such an elucidation of facts is calculated to represent how true it is that a certain diagnosis of chronic abscess of the brain, in the present defective state of our science, is only very rarely possible.

(To be continued.)

[2] Münchener Klinische Wochenschrift, 1887, p. 19.

[3] Deutsches Archiv für Klinische Medicin, 1894, vol. lv., p. 557. Kochel has gathered together in his treatise also a few of the cases recently published by Fürbinger, Königsdorf, Bucklers, and Leichtenstein, under the name "primary cerebral hæmorrhage," a denomination first used by Strumpell. But even these cases also have great clinical and anatomical analogies to those which should be designated chlorotic thrombosis of the cerebral sinuses. A decision with regard to this is as yet immature. The above-mentioned observation is important, as no infectious disease preceded it. As a rule it is influenza which seems to give rise to primary cerebral hæmorrhage. Our microscopic observations showed no irritative phenomena, no infiltration of the vascular walls or emigration of leucocytes; the histological report corresponded completely with that of ischæmic softening. So far as I know, no other microscopic observations but those of Kochel have been made, but although he found the aspect of the nervous matter in the chlorotic thrombus very like that of primary cerebral hæmorrhage; our case, on the other hand, differs very considerably.

CASES ILLUSTRATING THE SURGERY OF THE KIDNEY.

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ON April 9th, 1889, I had the honour to read before the Royal Medical and Chirurgical Society an account of my first twenty-five cases of extirpation of the kidney by abdominal section,[1] and an abstract of my paper will be found in THE LANCET.[2] I now propose to continue the record of my cases of nephrectomy and also to give brief notes of other interesting cases of renal surgery. I shall give a short reference to every case I have operated upon since No. 25 in the table accompanying the above paper,[3] and record at greater

[1] Transactions of the Medical and Chirurgical Society, vol. lxxii., 1889.

[2] THE LANCET, April 13th, 1889.

[3] Transactions of the Medical and Chirurgical Society, vol. lxxii., pp. 312-315.

length the cases possessing special features of surgical or pathological interest.

CASE 26.—The patient was a young woman twenty-five years of age, suffering from advanced tubercular disease of the left kidney, with a large perinephric abscess. Dr. Broadbent kindly saw her with me, and agreed that nephrectomy offered the only chance of life, though her condition rendered the operation more than usually grave. There was no distinct history of tubercle on either side. Her father had died of Bright's disease The mother said the patient had always been a delicate and nervous child. The urine, examined for me on three separate occasions by Mr. Malcolm, was of good specific gravity and colour and deposited urates, contained rather more albumen than the pus would account for, only about half the proper quantity of urea (she was entirely confined to bed and taking very little food), and was scanty in quantity. I thought, however, that we might fairly hope that the other kidney was capable of doing its work well. She had been really ill for two and a half years, the first symptom being frequency of micturition, six months later pain in the renal region, and pus in the urine. In the summer before I saw her she had got a chill during menstruation, and after this became rapidly worse; and in the autumn a specialist was called in and aspirated the kidney through the loin, only obtaining a very small quantity of very thick matter. The immediate result of this operation was great increase of pain and fever, with a diffuse tender swelling behind the kidney (perinephric suppuration). I operated on March 25th, and the operation was prolonged and difficult, owing to the extent and denseness of the adhesions. She did not rally well from it, but at first the kidney acted remarkably well. The day after the operation the urine was loaded with pink urates. There was some sickness on the first day and more on the second; the temperature fell quietly to 98·6° F.; but the pulse was quick and weak, and during the day the urine gradually decreased in quantity till 4 P.M., when complete suppression set in; at 5.45 P.M. she had a severe convulsion, became comatose, and died at 7.17 P.M. The temperature was 97·0°, and the pulse shortly before death was 108.

Surgically all went well. I drained the sac with a glass tube, and before death there was nothing but a little clear sweet serum from it, and in a well-doing case the tube would have been removed. I am at a loss to account for the sudden failure of the kidney, but, considering all the symptoms, I think it was a form of septicæmic poisoning, and I firmly believe that the death should be attributed rather to the aspiration and its unfortunate results than to the nephrectomy, which failed because it had not a clean field and came too late. There can be no doubt that perinephric suppuration adds enormously to the risk in these cases. The only patient in the paper referred to above (No. 20) in which this condition was present also died in about forty-eight hours, exhausted with the profuse discharge. Of course, the large cavity round the kidney, with its burrowing sinuses and ragged pus-discharging walls, must, after the operation, add greatly to the work of the remaining kidney, but I regard suppression as usually indicative of some septic element. The one kidney, already burdened with extra work, quickly fails altogether when the elimination of septic organisms and their product also falls upon it.

CASE 27.—The patient was a young married woman aged thirty years, sent to me at the Samaritan Hospital by Dr. Lawrie of Weymouth. The right kidney was much enlarged; it weighed fourteen ounces after removal and after four and a half pints of fluid had been evacuated from its interior. The fluid was dark turbid urine, which became solid on boiling with nitric acid, contained pus, renal cells, and urates, 0·972 per cent. of urea, and was of sp. gr. 1024, and faintly acid. There was nothing worthy of note in the operation or recovery, which was rapid and uninterrupted. The interest lies in the pathology of the condition. The distended kidney was first discovered in the abdomen after the birth of the first child. She had been very large, and suffered much pain in her right side during the last five weeks of gestation, and the urine was thick and albuminous. The swelling gradually disappeared, and in her next two pregnancies gave her no trouble; in her fourth pregnancy she became very large in the fourth month, and again suffered great pain in the right side; the kidney was aspirated through the loin and seven quarts of matter (*sic*) were removed. Eleven weeks later twelve quarts were removed; six weeks later another six quarts; a fortnight later the child was born, and then the tumour, which was large after the birth, gradually disappeared. The urine passed was quite clear before the birth and very thick for a long time after. When she came into hospital she was passing about 30 oz. in the twenty-four hours. The specific gravity was high. It was thick with urates. There were no albumen, no pus, no casts, and there was a considerable tender swelling in the right loin and abdomen. At the operation the ureter was so small that I could not make it out, and it was cut and tied with the vessels. After removal the opening was found to be very minute and the tube somewhat twisted on itself. Doubtless these two conditions were at the root of all the trouble, and the case was from the first a congenital hydronephrosis, which became accentuated during the first pregnancy, and in this last pregnancy became a pyonephrosis. There was nothing in her family or personal history to throw any further light upon the case.

Most cases of hydronephrosis (not due to calculus) which I have seen appear to me to be congenital, and due to some malformation or malposition of the ureter; they are only intermittently troublesome till the distension becomes so great that the ureter is altogether blocked, or till some other disease or accident causes the formation of pus, when all the symptoms become aggravated. The condition is, however, often one of great discomfort or positive suffering to the patients from youth upwards, and is one in which they receive little sympathy, as so often the swelling disappears, and on examination there is nothing to be found to account for the patient's symptoms. The health often suffers greatly, and I am sure an earlier removal of the hydronephrotic kidney would be the proper treatment in most cases. Three patients in whom I have tried opening and draining are going about with loin fistulæ, and with no prospect of cure unless they submit to a further operation.

CASE 28.—This case has been fully recorded in a paper read before the Clinical Society.

CASE 29.—The patient was in the Indian Civil Service, aged thirty-one years, and had suffered from symptoms of renal calculus for many years, and been frequently invalided home. Calculus had been diagnosed, among others, by Sir William Jenner. I first saw him in January, 1886, and, after consultation with Dr. Paul, advised him to return to India and to try once more whether he could work, as he was then in excellent health and free from any serious symptoms. His urine at that time was of normal specific gravity and colour; it had a very faint trace of albumen and pus cells, but no blood discs, no crystalline deposits, and 2·45 per cent. of urea. There was absolutely nothing to be made out by physical examination, not even any marked renal tenderness. The history began in 1873 with dull pain over the left kidney, sometimes he could neither lie, sit, nor stand with comfort. These attacks of pain recurred from time to time till 1879, when they ceased, and he began to pass urine like coffee, always after excessive eating or drinking. Travelling never brought on any attack. In 1881 he had a sharp attack of Indian fever, followed by gout in both hands and feet, and in 1883 he had another attack of fever, and in 1885 a very severe attack with hæmorrhage from the bowels and pus in the urine. The latter, he remarked, "was probably due to the stone in my kidney." I found the right kidney distinctly large and free from all tenderness; the left I could not define, and no amount of pressure over its situation or along the course of the ureter caused any discomfort. My examination produced a good deal of pus in his urine, and a few days after some specimens contained a large quantity of oxalates, some very large. He returned to India, but was very soon again out of health, and eventually in 1889 came again under my care for exploration of the kidney. I operated on June 1st, 1889, Mr. Murray giving chloroform and Mr. Malcolm assisting, Dr. Walker, who had attended him, being also present. I made a small abdominal incision over the left kidney, and found the right kidney to be large and healthy, the left sacculated and soft; there was no trace of a stone either in the kidney or the ureter, but the lower two-thirds of the latter was distended with urine to the size of a large sausage. No amount of manipulation would make this pass into the bladder. I removed the kidney, dealing separately with the vessels and ureter, and then found that a large pair of forceps ran easily through the ureter into the bladder. Evidently the obstruction to the escape of the urine was due to a curious valved and sacculated condition, which became more marked on fluid pressure from above. This condition was the only pathological one found, and must have been the cause of the gradual destruction of the

kidney, which was converted into a mere shell. The patient made a perfect and uninterrupted recovery, was shooting partridges in September before his return to India, has enjoyed the best of health since, and plays cricket and endures severe fatigue in big game hunting in India—in fact, can do everything that a strong man can do.

This case appears to belong to the same class as the preceding one—malformation of ureter, hydronephrosis, pyonephrosis, and gradual destruction of the kidney.

CASE 30.—The patient was a young man aged twenty-two, whom I first saw in consultation with Dr. Heron in June, 1889. He had also been supposed to be suffering from calculus till Sir Joseph Lister diagnosed renal tumour and suggested that I should be consulted. The history was as follows. In 1884 he had connexion with a prostitute, and had as a result some matter under the prepuce, and redness and irritation of the glans, but no urethral trouble. I mention this because a question of syphilis arose later, and he was treated for it in consequence of the condition of the glands in his groins, but I do not myself believe that he ever had syphilis. In 1886 he first noticed blood in his urine, and had pain in his left loin, never any pain in passing urine or after the act, but occasional ache in the penis, which he attributed to small clots sticking in the urethra. He had two or three attacks of very severe pain and had been laid up with one of them in an infirmary. The pain was agonising and extended down the course of the ureter and into the left testicle, and there was on one occasion almost complete suppression of urine. These attacks ended by the passage of long, red, worm-like bodies, which from his description were evidently blood casts of the ureter. He was one of a large and fairly healthy family, but his mother died from phthisis; his father, a strong old man, was alive and well. There was no history of malignant disease. Examination showed a very considerable smooth enlargement of the left kidney, with the colon crossing its lower and inner border. It was tender to touch, but not very markedly so. The patient was thin and sallow and had an anxious expression, and his face indicated a good deal of suffering. The passage of blood casts of the ureter is a very important symptom of malignant growth in the interior of the kidney, and I feared that this would prove to be the nature of the disease in this case. The diagnosis entered in my case-book was "malignant disease of the left kidney, probably intra-pelvic." I operated on June 20th, 1889, Dr. Heron being present, Mr. Murray giving chloroform, and Mr. Malcolm assisting. I made the usual Langenbuch incision over the kidney and first examined the right kidney, which was large and healthy. The left kidney was much enlarged and lobulated, and in the pelvis close to the renal vessels was a hard substance which I at first thought was a stone. I accordingly incised from the loin, and the knife plunged into a large cavity from which very free dark hæmorrhage took place. On introducing my finger I found it was a dilated calyx full of soft growth; the mass I had felt from the peritoneum was a harder mass of growth projecting into the pelvis. I now decided to remove the kidney. Enucleation was very difficult owing to the dense nature of the adhesions, and several times my finger passed through the soft outer wall into calyces full of growth, and considerable quantities of brain-like matter escaped into the capsule. I was obliged to put a pair of large Wells's forceps on to the vessels and a smaller pair on to the ureter and divide both before I could get the mass drawn down and get at the extensive and dense adhesions in the upper part of the abdomen. During the separation I suddenly heard a curious whistling noise and felt air rushing over my fingers, and knew that I had wounded the pleura. I tied the vessels and ureter separately, and pinned the latter into the lower angle of the abdominal incision. Though I could hear and feel the rush of air I could not find the wound in the pleura, which must have been a small slit. I passed a rubber drainage-tube through the loin wound into the upper part of the sac, and a glass tube into the lower part through the abdomen. The operation lasted two hours and three-quarters. The chloroform being very badly taken, owing to the patient evidently having a bad cold and cough, was a cause of much loss of time. He bore the operation well and was in very fair condition when I dressed him in the evening, but during the night the temperature rose rapidly to 103° F. and the nurse applied ice to the head. Early next morning dark brown sickness began, and in the middle of the day I washed out the stomach. There was some trouble with the breathing during the day, and the chest was jacketed in linseed meal poultices. On the second day the expectoration was rusty, and the dark vomit began again. The patient was very restless. The temperature was 102° and the pulse 116. I again thoroughly washed out the stomach and reapplied the poultices. He passed fifty-four ounces of urine in the first twenty-four hours, with much blood in it at first; but it soon cleared. He took wine and beef-jelly freely, and the rectal injections were well absorbed. Dr. Heron examined the chest on the fourth day, and found very little action in the left lung and the heart displaced to the right side. The bowels acted well after an enema on the fifth day. Dr. Heron again examined the chest and found the heart in a better place, cardiac dulness being normal. In the evening the patient had an attack of acute pain in the left chest, and poultices were reapplied. From this time recovery was rapid and only interrupted on the twelfth day by a violent attack of pain in the abdomen from eating a lot of strawberries without my permission. There was never at any time polyuria, which is so common after nephrectomy from about the tenth day onwards. He was out driving on the twenty-eighth day and is quite well at the present time.

The growth was a soft, brain-like sarcoma (large round cells chiefly), and sprang from the lining membrane of the calyces and pelvis. The escape of much of this into the capsule during the enucleation made me anxious as to recurrence, but it is now over five years and there has been no sign of it, so I hope that he is safe. He has never been very strong, either before or since the operation, but can play cricket and lawn tennis, boat and swim, and walk well. In the early days after the operation he suffered much from flatulent distension of the colon, but this has practically ceased with care in regulating the bowels and the occasional use of a little atropia and morphia. The wound of the pleura never gave any serious trouble, and must, I think, have closed pretty quickly. There has been no flattening, and there is nothing different to be detected between the two sides with the most careful auscultation and percussion.

(To be continued.)

CONDITIONS OF THE DWELLING AS AFFECTING RECOVERY FROM MEASLES.[1]

BY J. SPOTTISWOODE CAMERON, M.D., B.SC. EDIN.,
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GIVEN a greater or smaller prevalence of measles, the question as to which of the sufferers shall die and which shall recover will depend largely upon their comparative resisting power. This resisting power is doubtless dependent upon idiosyncrasy, upon age, and upon other factors. Amongst the latter the sanitary environment is probably not the least important. "Poverty, hunger, and dirt" are likely to retard, if not prevent, the recovery of those attacked, and are amongst the most potent of the causes making for death. Everyone in practice knows how much less likely a half-fed infant, brought up in a dirty house, is to recover; but it is interesting, where possible, to ascertain, and if maybe statistically, what influence house conditions themselves have in this matter. During the three years 1891, 1892 and 1893 the dwellings of some 1770 patients who suffered from measles have been examined by the ward inspectors in Leeds. Our information in the first instance was generally obtained from the death returns, but where an outbreak occurred in any district the inspector would sometimes inquire from house to house in the neighbourhood of its prevalence and ascertain what other cases existed and the conditions of the dwellings. Frequently he would obtain information from the teachers at the neighbouring schools as to absentees and visit their homes. In one or other of these ways most of the 1770 cases came upon our books. Naturally, our information having been thus gathered, it included a large number of fatal cases, 657 in all. In the same houses in which these patients

[1] Read at a meeting of the Leeds and West Riding Medico-Chirurgical Society, Jan. 11th, 1895.

died we heard of 229 who recovered. These 886 cases occurred in 627 actual dwellings—that is, an average of 1·4 per house. The remaining 884 cases, all of which, so far as is known, recovered, occurred in 547 houses—that is, again, 1·6 per house. Although these numbers are not very large, they yet afford a certain amount of material for comparison. In order to make the comparison more striking it will be convenient to regard the houses in which the 884 patients recovered as if they had been 884 houses instead of 547. Each patient lived in a house, and the condition of such house has been recorded. In this way many conditions, favourable or otherwise, which may have affected the recovery, are repeated for every measles patient exposed to their influence. The information is regarded as dealing with what has been elsewhere called "recovery houses." In the same way the 657 deaths, which occurred in 627 actual houses, are dealt with as if there were 657 "death houses," the 229 recoveries in these houses being for this purpose ignored. There is, however, one exception to this mode of dealing with the figures—that is, in regard to the actual density of population in the houses themselves. In obtaining the relation of houses to inmates, houses to rooms, and rooms to inmates, it has been thought better to deal only with actual houses in both cases. I will deal with this exceptional matter first.

Density of population.—In the 627 actual houses in which one or more deaths occurred there was an average of 5·98 inmates per dwelling, while in the 547 actual houses in which the 884 cases of measles recovered, without a death, the average number of inmates was 5·93. There were, therefore, rather more persons per house where death occurred than where recovery was the rule. The number of persons per house, or rather per tenement, in the whole of Leeds at the 1891 census was 4·66. The density of population in these measles houses, both where death occurred and where death did not occur, was therefore considerably in excess of the average house population of Leeds. The excess is probably even greater than the figures show, for wherever we have been able to compare the number of inhabitants enumerated in any group of houses by the census officials, and by our own private inquiry, it has always been greater in the former. The difference between 5·98 and 5·93 does not look very much, but it is close upon 1 per cent. In the actual houses in which death occurred there was an average of 3·18 rooms per house. In the 547 in which all the patients recovered the rooms averaged 3·80. When we come, therefore, to examine into the ratio between the rooms and occupants it is not surprising to find that in the 627 actual houses in which death occurred the number of persons per room was 1·88, while in the 547 in which measles did not prove fatal it was 1·56—that is to say, there were about 20 per cent. more persons per room in the former than in the latter. If we deduct a living-room from each house the number of rooms in the 627 houses in which death occurred becomes 1368, and the inmates per room become 2·7. Similarly the rooms in the 547 houses with no death become 1534, and the inmates per room 2·1, or as 9 is to 7.

Back-to-back dwellings.—I will now quit the actual houses for the death houses and recovery houses, as explained before. The 657 death houses comprised 542 which were either back to back, "salt pie," or single houses without opening in the rear, and they included 115 death houses which had a through draught. These numbers represent 82·5 per cent. of death houses without, and 17·5 per cent. of death houses with, a through draught. The corresponding percentages for the recovery houses were 78·5 without, and 21·5 with, a through draught. These figures are altogether irrespective of other surroundings, such as, for instance, where a through house might have its back yard largely occupied by a midden privy, or where a back-to-back house might stand in a thinly populated district. Generally the larger houses in which measles occurred would be through houses. Our inspectors, however, would naturally investigate chiefly the outbreaks in populous parts, although the death houses, whether large or small, would all be visited. That is to say, while all death houses are in the list, the recovery houses would naturally be chosen from those most easily reached along with other work.

Disconnexion of drains.—Of the 657 death houses 24·4 per cent. had drains which were severed entirely from the sewer, 71·2 per cent. were not severed from the sewer, and 4·4 had no drain at all. The corresponding figures for the 884 recovery houses were 27·5 disconnected, 70·2 not, and 2·3 without any sort of drain. Measles would, therefore, seem to have been more fatal in houses not properly severed from the sewer and in those which had no drain.

Closet arrangements.—In regard to the arrangement of closets I propose to divide the houses into three groups—viz., (1) those which had inside or outside waterclosets; (2) those which had the use of latrines (or trough waterclosets); and (3) those which had closets on the midden or pail system. Amongst the death-houses the watercloset system was found in 17·2 per cent., the latrine system in 38·8, and the dry—that is, the midden or pail—system in 44·0 per cent. Amongst the recovery houses those using waterclosets jumped up to 33·6 per cent., those with latrines were only 24·7 per cent., and those with one of the dry systems of refuse removal were 41·7 per cent. Measles was therefore less fatal amongst the houses with waterclosets and more fatal amongst those with latrines and middens or pails. There are of course certain fallacies about this method of computation. It has been necessary, for instance, to reduce the number of conveniences of this kind to one for each house, and a slight variation might occur with regard to the waterclosets if the computation were otherwise made, but as the difference in this respect between the death houses and the recovery houses is nearly as 17 to 34, it is probable that the possible fallacy may be safely disregarded.

In conclusion, dealing with sanitary conditions other than the question of back-to-back houses, and air space or latrine accommodation, the houses in each group may be divided as follows. First, taking all the houses to which there is a drain, in which every drain is severed from the sewer, and in which (if a watercloset exists within) the soilpipe is properly ventilated, and deducting from these all such as were found by the inspectors in a dirty condition, overcrowded (that is, having not less than three inmates per room), and all such as had drainage or other serious nuisance (such as a midden within three yards of the house), the remaining houses which might be regarded as sanitary in regard to drainage, cleanliness, &c., made up in the first, or death, group 19 (19·03) per cent. of the whole. Those having some or other of these sanitary defects (exclusive of want of through draught or existence of a midden if such were remote from the house) formed 81 per cent. (80·97). Amongst the recovery houses the corresponding percentages were as follows: in a sanitary condition 24 (24·43) per cent., and in an insanitary condition 76 (75·57) per cent. On the whole, the conclusion seems to be warranted that the fresh air provided by a through draught tended to produce recovery where measles had attacked the family, while overcrowding, dirt, and structural or other insanitary conditions assisted in bringing about a fatal result.

Leeds.

SEVEN CASES OF AMPUTATION AT THE HIP-JOINT.

BY F. T. PAUL, F.R.C.S. ENG.,
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THE following seven cases constitute my series of secondary amputations at the hip-joint. The patients all recovered, and none of them suffered more shock than they would have done from any other major operation. This amputation would, I imagine, be more frequently put in practice in hopeless cases of hip disease were it not for its bad reputation in the way of mortality. The high death-rate is due to shock, and it is by correctly appreciating the conditions which create shock that we may hope to obtain better success. Statistics show that the mortality after amputations increases as they approach the trunk; yet after an experience of a considerable number of amputations of all kinds I have arrived at the conclusion that the severity of the shock is not at all regulated by the number of inches removed. On the other hand, it has appeared to me that when a limb has been a great source of pain and exhaustion to a child, its rapid and comparatively bloodless removal may be followed by an almost immediate improvement in the general condition. In my judgment, hæmorrhage is commonly the first factor in the causation of shock following amputation, and the second is the combined effect of the extent and duration of the tissue injury. Of course, these are often in proportion to the height of the amputation, but they are

not necessarily so. The wound is, or need be, very little larger in hip than in middle-thigh amputation, and as the latter involves division of a large bone, whilst the former can be completed without, any little inequality in the size of the wound is thus neutralised. Then, as regards duration, a hip-joint amputation may be performed in about the same time as any major amputation. If, therefore, it were conceded that neither the extent of the wound, nor the time necessary to complete the operation satisfactorily, contributed materially to the production of an undue amount of shock, there remain only the two factors of inches and hæmorrhage. The former, as I have said, seems to me to have *per se* very little effect; and if this is true the higher mortality of amputations at the hip-joint must be attributed to the greater difficulty which has been experienced in controlling the hæmorrhage. That the want of a good method has been severely felt is evidenced by the number of suggestions which have been made with a view to overcome this difficulty, and it is only because no method is so satisfactory as to be universally adopted that I mention the simple plan of fixing an Esmarch's tourniquet adopted in my cases. It has proved reliable and effectual, and in no case was there any more troublesome bleeding than in an ordinary amputation through the thigh. The operation employed was a large anterior flap cut from without inwards, disarticulation, and a shorter posterior flap cut from within outwards. The femoral artery was always tied as soon as the anterior flap had been cut, from fear of accidents, and I think this should be the rule, as half a minute's

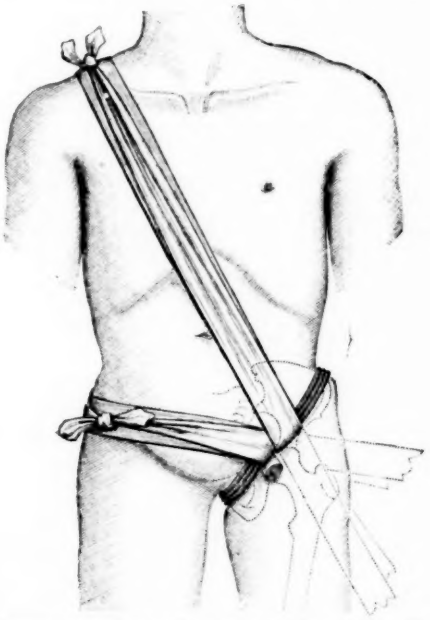

Diagram showing simple mode of applying Esmarch's tourniquet in operations on the hip-joint.

free bleeding from the femoral artery would probably be fatal in one of these exhausted children. The mode of fixing the elastic tourniquet is almost childishly simple. Two pieces of calico bandage are placed in position, as shown in the engraving, one crossing the opposite shoulder and the other the opposite hip. The tourniquet is applied over these pieces of bandage round the innominate bone, being hitched above the crest of the ilium in front and the tuberosity of the ischium behind. Then the free ends of the bandages are carried back to the shoulder and hip and tied sufficiently tight to prevent slipping when the limb is removed. This takes off some of the elastic strain over the external iliac artery, so a roller bandage is pushed under the tourniquet at this spot to increase the pressure on the vessel. The plan described is certainly less severe than Wyeth's method with steel mattress needles, and is, I believe, equally secure; at any rate, I have used it in all my cases and feel that I can recommend it with confidence, for I attribute the success obtained almost entirely to the absence of any appreciable loss of blood, due to the satisfactory manner in which the tourniquet controlled the vessels.

CASE 1.—A boy aged eight years was admitted in 1882 suffering from chronic hip-joint disease, for which excision had been performed in 1881. There was continued discharge and commencing lardaceous disease. He recovered well from the amputation, but when last seen, a few months subsequently, still had discharging sinuses.

CASE 2.—A girl aged eleven years was admitted with hip-joint disease in December, 1882. Excision was performed. There was extension of caries to the femur, with copious discharge and rapid emaciation, as well as marked lardaceous disease; the liver was very large, extending to the umbilicus. Amputation at the hip-joint was performed on Oct. 24th, 1883. The patient was collapsed for a short time, but soon rallied and had the usual temperature of 101° F. the same evening. She made a splendid recovery, and became very fat and strong before she left the hospital. The lardaceous disease retrogressed day by day, and at the end of three months there was not a trace of it. The reason of the better recovery in this case was that the disease was limited to the femur, for the patient was more exhausted at the time of operation than any of the others.

CASE 3.—The patient was a girl aged twelve years, who had spent most of her life in hospital on account of chronic disease of the hip-joint. She was for years in the Royal Infirmary, and then went to the Home for Incurables. From the latter institution she was sent to me by Mr. Hopper for amputation. The operation was performed on Jan. 12th, 1887, and in the course of a few months she was sufficiently well to return to the Home for Incurables, where, I am informed, she was subsequently "cured." Although she had been so long ill, the liver and spleen were only slightly enlarged.

CASE 4.—The patient, a woman aged twenty years, had a sarcoma of the knee, for which I amputated through the middle of the thigh on Jan. 29th, 1890. She returned with recurrence in the stump on June 2nd, for which she was amputated at the hip-joint on the 3rd. The temperature the same evening was 98° F. There was no shock. The temperature next evening was 98·2°. She made a rapid recovery, and was discharged well on July 9th, but ultimately died from recurrence in the lungs and other parts.

CASE 5.—The patient, a girl aged twelve years, was another old case of hip joint disease with exhaustion. After sending her to the country for three months to try to put a little fresh life into her I amputated the limb on Sept. 27th, 1892. There was very little shock. The temperature the same evening was 98·6° F., and the next night 99·4°, whereupon it continued as before, between 98° and 100°. She was discharged in March, 1893, being able to get about, but still with some sinuses unhealed.

CASE 6.—The patient, a man aged forty years, was admitted on March 24th, 1893, for a sarcoma of the inter-muscular fascia of the thigh, the size of a small cocoanut. Amputation at the hip-joint was performed on the 25th. There was no appreciable shock. The temperature the same night was 100° F., and continued slightly above normal for several days. The wound suppurated, but he was able to go home on May 8th, and subsequently gained flesh, becoming stronger than he had been for a long time. He is still (January, 1895) free from recurrence.

CASE 7.—The patient, a boy aged eleven years, had hip and knee disease on the same side. The knee was quiet and firmly ankylosed at a right angle. The hip was discharging freely through long sinuses. He was admitted on March 21st. Amputation at the hip-joint took place on the 29th. The axillary temperature for the same evening is recorded as 96·4° F., but he certainly did not suffer acutely from shock, as I cannot remember feeling any anxiety about him, and the subsequent progress was good. The temperature only once reached 100°—viz., on the fourth evening—and after the seventh day it was normal. On May 10th he began to get about on crutches, and on the 17th he was discharged.

Rodney-street, Liverpool.

MR. W. G. EVANS, public vaccinator to the second district of the Frome Union, has been awarded the Government grant for successful vaccination for the fifth time.

ON A MORE FREQUENT USE OF FORCEPS IN MIDWIFERY PRACTICE.[1]

BY WILLIAM BERRY, F.R.C.S. IREL.,
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THE idea of this paper was conceived in Liverpool at a meeting of the North of England Gynæcological Society, when a paper was read by Dr. Macfie Campbell on "A Plea for the More Frequent Use of Forceps." I thought when I went to the meeting that I had, as an ordinary general medical practitioner, kept up with the times, and had noted every advance in the obstetric art. I went prepared to criticise and be criticised, armed with statistics of twenty years' practice; but found, to my surprise, from the reader of the paper and the remarks of younger men, that I was, to use the homely phrase, "licked into a cocked hat." It is no intention of mine to argue as to why forceps should be used. The indications and rules for the application of forceps are rigidly laid down in every text-book on midwifery. Before giving the opinions of others on the use of forceps I will furnish statistics as to their use in my own practice.

First ten years, 1875–1884. No. of cases, 1246: forceps, 203; tedious (not forceps), 96; or 1 forceps case in 6·133, about 16 per cent. Now, if we add the tedious cases, which perhaps ought to have been forceps cases, we have 1 in 4·166, or about 24 per cent.

Second ten years, 1885–1894. No. of cases, 829: forceps, 133; tedious, 50; or 1 in 6·233; with tedious, 1 in 4·475.

Dr. Macfie Campbell says that he has used forceps in 29 per cent. of his total cases, and of these 50 per cent. were in primiparæ and 20 per cent. in multiparæ; that is to say, in every other primipara he found it advisable to terminate labour instrumentally, while in multiparæ he used forceps, one in five cases. Of these cases taken together one in four were long forceps cases, in the others Braithwaite's short forceps were used. The *New Zealand Medical Journal*[2] states that Dr. Alexander of Wellington had attended between January, 1892, and May, 1894, 170 labours. In 65 cases chloroform was given and the forceps were applied. This is a little over 39 per cent. of cases. He says the patients were saved a great deal of pain, and as they were not exhausted they made good recoveries. Dr. Macfie Campbell had stillbirths 1 in 31, or 3¼ per cent. over all his cases. He had no maternal deaths in 180 cases—that is, his last 180 cases. His maternal mortality was 1 in 177, including a labour during typhoid fever and a case of hydatids, in neither of which were forceps used. In his recent cases he finds that the proportion of forceps cases is greater than in his earlier time—namely, 37 per cent., or nearly so. His course of proceeding, as stated by himself, is as follows: "If I find on arrival that the os is undilating or not larger than a shilling I go away; if the os is larger, dilating, and the pains regular I remain, but never, or hardly ever, give chloroform at this stage. When the os is fully dilated or the membranes have given way I give chloroform. If the labour goes on regularly, well and good; but if delayed I never allow a patient to be longer than one hour and a half under chloroform without delivery. Excluding cases of disproportion, the delay in these cases is below the brim or on the perineum, and the short forceps soon terminates them and conserves the maternal strength. I have never regretted early interference, but often have delay, and have frequently felt sure that I have saved children which otherwise would have been stillborn. That, of course, is belief, not fact, which admits of proof. I have never had a perineal rupture which would have required operation. As a routine I put in a catgut stitch immediately if the fourchette, which always, or nearly always, gives way in first labours, is torn beyond the commissure." He says also: "I never use ergot before delivery, and hardly ever after, which was once my routine practice." Dr. Alexander believes that the questions how soon the forceps should be used and whether chloroform is needed when they are applied remain unsettled. He says the custom of the country has much influence, so that the medical attendant is not altogether responsible for the frequency of the employment of the forceps. Thus in Wellington, New Zealand, the patient insists on complete narcosis, so that the pains generally disappear; after the loss of consciousness the forceps are required. Mr. Rumboll of Leeds attended 102 confinements from 1892 to October, 1894; of these, 71 were multiparæ and 31 primiparæ. Chloroform was used in 91 cases, 68 times to the surgical extent, in 23 sufficiently to deaden pain. Forceps were used 68 times, in 28 out of the 31 cases of primiparæ. Of these cases 7 had split perineum, which was stitched at the time with three sutures of silkworm gut. All healed by first intention. In the multiparæ one case of split perineum occurred, which did not heal by first intention, and a secondary operation was performed. In five cases the child was born before his arrival. Out of the 102 cases six had a temperature above 100° F.; in three of those cases the child was born before his arrival, one was stillborn, and two cases were breech presentations. Perchloride of mercury was used for the hands of the operator and the external genitals of the patient were bathed with it; forceps were dipped in a 1 in 20 carbolic lotion, and carbolic vaseline was used as a lubricant. In most of the cases the uterus was washed out with water which had been boiled, but with no antiseptic. Out of 600 cases Mr. Rumboll had no maternal death. Dr. F. Churchill estimated the frequency of forceps cases to be among British practitioners about 1 in 171; French, 1 in 140; and German, 1 in 106; or, in a total of 985,446 cases of labour, about 1 in 115. Somewhere about 1866 Dr. Hardie of Manchester wrote a paper[3] in which he advocated that after the second stage had occupied two hours labour should be terminated in the interests of mother and child by the application of forceps, as by such a procedure we prevented the mother becoming exhausted, and prevented the child in many cases from being stillborn. Since I commenced practice here I have tried to follow this plan, but have not always been successful in having my own way, the aversion of the patient to the use of instruments having to be considered. Only in a small proportion of my forceps cases have I given chloroform. Unless a good and sensible nurse is present it is not easy for one man to give chloroform and apply forceps; if a reliable nurse is at hand, no doubt she can see to the chloroform after the patient has been anæsthetised, whilst delivery with forceps takes place. When I was a student we were told a great deal about meddlesome midwifery being bad, and how dangerous it was to interfere with a natural physiological process; then we were given rules which should guide us in the application of forceps, such as os fully or almost fully dilated, membranes ruptured, and certain obstructions to the head coming down, either from fault of the mother's pelvis or the too large size of the child's head; the fault of the uterus itself getting overtired and exhausted and unable to rid itself of its burden. Roughly speaking, these were the chief indications for the use of the forceps; the sufferings of the mother were never considered, nor the time of the medical practitioner, and at the period I speak of he was supposed to watch and wait, "forsooth for labour pains," and not use any instrument to aid delivery unless the indications I have mentioned existed. The curse put on the daughters of Eve that she should bring forth in suffering and sorrow may have had something to do with the reluctance of accoucheurs to interfere, but probably the chief cause was the danger to the mother and child from the use of instruments. I have an impression—which, however, may be wrong, and it certainly cannot be proved—that a tedious case of labour terminated without artificial aid recovers sooner than a difficult forceps case. The dilatation of the soft parts never seems to be taken into consideration nowadays. The rigid perineum seems either not to exist or be forgotten. I remember when I was undergoing my final examination being asked by an old obstetrician what I would do if I had a case of rigid perineum. If I had said I would give chloroform and put on the forceps I fancy I should have got three months to do it in, but knowing that he was a gentleman with a grandmotherly feeling I told him I should foment the perineum and apply lubricants. I need not say that I have not followed this practice since, although I obtained my diploma and a certificate in midwifery.

Now have we not progressed with the progressives and gone to the other extreme? Is it correct practice, now that we have such faith in antiseptics and confidence in ourselves, to make labour as easy as this, and as soon as we can after being called to a case to give chloroform and apply forceps and deliver the child, then express the placenta, syringe out the uterus with sterilised water, swab the vagina and vulva with perchloride of mercury solution, put on a binder, straighten the

[1] A paper read before the Wigan Medical Society on Dec. 6th, 1894.
[2] Extract in Brit. Med. Jour., Oct. 6th, 1894.
[3] Braithwaite's Retrospect.

bed, sprinkle the patient with eau de Cologne, put on our hat, take our bag, and depart? If it is so, then we have attained the acme of perfection in midwifery, and we have "labour made easy" with a vengeance. The "new woman"—I mean the new midwifery woman—will have no chance of competing with us, and the "new woman" need have no dread of maternity. If this is admitted my professional brethren will endorse a line of treatment which will enable me to spend as little time as possible in the lying-in room, and I shall be in a position to defy nature's waywardness in her maintenance of our race. But first let me be just to the men who advocate this plan, and, by way of conclusion, quote the advice of Dr. Macfie Campbell—advice as well as a note of warning. He says: "In advocating this free employment of instrumental help I speak to men of experience and manipulative skill, and do not mean this for students or very young practitioners. For a young practitioner to have a mishap with a forceps case, especially as all teachers do not think alike, might be fatal to his reputation. He had better delay or get assistance until he can afford complete independence. Finally, meddlesome midwifery, as we were taught of old, is bad, but a policy of leaving things to nature is often one of leaving them in very bad hands." Now, if it had not been for this note of warning I should have gone on my way rejoicing that we had found at last our El Dorado in midwifery practice, that we could advertise "labour made easy," perform the work at our own time and in our own way, and give a promise to the "new woman" that maternity could be purchased without risk and without suffering.

BILATERAL FACIAL PALSY AS A SEQUENCE OF INFLUENZA.

BY W. J. BARKAS, M.R.C.S. ENG., L.R.C.P. LOND.

CASES of bilateral facial palsy are very rare even when caused by injuries or in connexion with diseases of the brain or the temporal bone, or from syphilitic, gouty, &c. diatheses; but when purely uncomplicated they are very uncommon. The case I now record is one of simple neuritis of both facial nerves after their exit from the stylo-mastoid foramen unless it can be considered that influenza acts directly as an animal poison to the nerve tissues, as has been suggested by Drs. Gowers, Althaus, Ross, Bury, Sansom, and others. That the influenza may have been a direct factor in its causation I am very much inclined to believe, as my patient's brother had an attack of Bell's paralysis after influenza about a month previously. It may also be incidentally noticed here that in this case the heart's action (which previously had been slow) remained persistently somewhat rapid—a fact that further points to some of the cardiac nerves having also been affected by the influenzal poison.

The patient, a medical man thirty-six years of age, married, resides in a district nearly one hundred miles from Sydney, which is bitterly cold and bleak in winter. There is no personal history of syphilis, alcoholism, or any other diathesis, and he has always enjoyed good health. His brother had an attack of right Bell's paralysis after having been ill with influenza, as also his father twenty years ago. As the patient did not come under my observation until four days after the seizure I shall append his personal statement concerning that period: "The attack of influenza commenced about the end of June with slight pyrexia during two or three nights (nearly 100° F.), but normal in the morning, and there was no further pyrexia afterwards. There were rapid pulse, persistent pains in the head and back, and also all over the body occasionally, and total loss of appetite. All of these symptoms subsided very slowly, leaving great debility, anorexia, and heart rapidity for about four weeks. At the end of that time the appetite increased, and the night sweats during sleep, which had been very troublesome all through, began to disappear, the influenza not being sufficiently bad during this time to prevent me seeing my out-door patients. At the end of July we had some extremely severe weather, with snow and persistent gales with sleet, and the driving against these winds caused considerable discomfort to my face. On the morning of July 26th I noticed on waking stiffness and swelling of the left side of the face, and on attempting to shave found I had no power over the labial muscles. I could still whistle, and the closure of the eyelids was not complete. On the following morning I found complete facial paralysis on both sides, the face felt stiff, and the lips hung down, the face generally being flaccid and the forehead smooth; the nerves of sensation were not affected at any time; all voluntary movements of the eyelids, lips, nostrils, cheeks, and forehead were impossible; the nostrils had fallen in; the eyes were open and exposed to dust or water when washing; eating was difficult and very slow, as the food got between the gums and the cheeks, and liquids nearly always escaped from the sides of the mouth. I thought there was an absence of taste two days before the paralysis appeared, but I am doubtful whether this was not due to the condition of the surface of the tongue, and about the same time I noticed some difficulty at the maxillary joints in mastication. There was a total absence of pain about the head or ears at any time, except what seemed like rheumatism of the muscles at the back of the head, but which was neither persistent nor severe." On the 30th he came to Sydney, when I first saw the patient. His symptoms then were similar to those mentioned in his statement, but there had been some slight improvement, as he could now lower the eyelids sufficiently to cover half the eyeball; he could also faintly twitch the lips and cheeks, and by pressing his fingers on the upper and lower lips he could speak fairly well, pronouncing even some of the labial sounds, but without that pressure he could not enunciate any words having b, f, p, m, v, u, w, y in their formation, nor could he whistle; there were no apparent movements of the facial muscles even under emotional influences, so that when one would expect to see the face wrinkle with smiles or laughter it remained an immovable mask. There was complete sensation everywhere. On firm pressure over each nerve at its exit from the foramen there was slight tenderness. Otherwise he was apparently well; he slept fairly, the appetite was good, and the tongue clean, but the bowels were rather sluggish. The heart's action, however, still remained somewhat rapid, averaging 96; but there were no marked symptoms of any cardiac lesion or any rise of temperature. He had been taking a mixture of salicylate of soda, strychnine, and digitalis. This I stopped, and ordered the following: five grains of iodide of sodium, ten grains of bromide of sodium, five minims of tincture of digitalis, fifteen minims of syrup of orange peel, to half an ounce of water—every four hours; also a smart purge and blisters behind each ear every other day. In four days there was very rapid progress towards recovery, but more so on the left side than on the right, and I then ordered the following: twenty minims of dilute hydrobromic acid, half a grain of sulphate of quinia, ten minims of tincture of strophanthus, infusion of orange peel to one ounce—every four hours; and blister on right side only. On July 11th (seventeen days after seizure) the left side of the face had almost completely recovered, and consequently the face had not now the expressionless appearance of double palsy, but resembled that of unilateral or Bell's paralysis. He could whistle fairly well, and talk without compressing the lips with his fingers. As quinine mixture caused acute gastric disturbance I returned to the iodide of sodium mixture. On Aug. 17th the patient felt drowsy; there were pains in the lumbar regions and marked supra-orbital headache. The temperature was 99·6°, the heart's action 98, and the nerves on both sides of the face near the foramen were very tender on pressure. The gastric disturbance still continuing I changed the medicine to the following: five grains of iodide of potassium, eight grains of bromide of potassium, five minims of tincture of nux vomica, ten minims of tincture of strophanthus, to half an ounce of glycerine and water—every four hours, and repeated blister on right side. The feverish symptoms disappeared by the 19th, and the right side of the face seemed to be improving, but slowly. I used a weak galvanic current, but only for a minute or two, as the right facial nerve became very tender and painful. The muscles did not respond to the current on the right side. On the 26th (thirty-one days after the attack) the patient was progressing favourably; the face when at rest appeared in a normal condition, except that the right eye was rather more staring than the left. When talking or smiling the muscles showed deficiency of action, and produced the appearance of slight right Bell's paralysis; otherwise he was well and able to go out, having the ears and adjacent parts of the face covered by thick pads. The rapid heart action still continued, but did not cause any marked disturbance. From this time he continued to progress very well. On Sept. 6th the action of the muscles on the right side was not quite perfect, but unless special attention was drawn to the fact the loss of motion would not be noticed.

Paddington, Sydney, New South Wales.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A WELL-MARKED CASE OF AINHUM.

BY A. E. BARRATT HINE, M.R.C.S. ENG., L.R.C.P. LOND.,
SURGEON TO THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

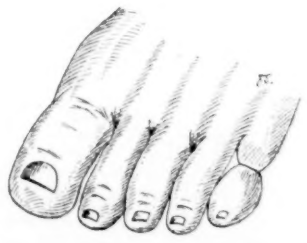
A LASCAR twenty-two years of age came to the surgery of the ss. *Pekin* complaining of shooting pains in his legs and of the discomfort arising from the state of two of his toes. On examination the fourth toe of the right foot and the fifth toe of the left foot showed a well-marked constricting sulcus surrounding them, presenting the appearance shown in the accompanying sketches. (Figs. 1 and 2.) (The fifth toe of the right foot had been amputated some seven years ago, the result of an accident.) The sulcus was in each case deeper on the inner and upper surfaces than on the outer and lower.

FIG. 1.

The right foot, showing the sulcus on the fourth toe. The fifth toe had been amputated previously for injury following upon accident.

The patient could give no cause for the condition, and said it had been gradually developing for the past four or five years, but it had not troubled him until recently. Having read Dr. Manson's article on "Ainhum" in "Davidson's Tropical Diseases," I at once recognised it as a case of that disease. The distal portion of each of the affected toes was quite healthy in appearance, excepting a marked hypertrophy in the case of the fifth toe, and at the constricting rings there were no signs of any ulceration. Sensation in the affected toes was diminished, but the patient suffered severe pain at times from knocking them against anything, evidently from the nerves being gripped in the constriction. Treatment for some time was palliative,

FIG. 2.



The left foot, showing sulcus on the fifth toe.

but as the man said the pains in his legs prevented his sleeping, and the state of his toes interfered with his work (these men use their toes almost as a second set of fingers), I amputated both well behind the seat of the disease, and in a fortnight he returned to his work. I had ventured to promise him that the pains in his legs would disappear when the toes were cut off and fortunately for my reputation among the Lascars on board such has proved to be entirely the case. These pains were evidently due to irritation of the terminal branches of the posterior tibial and muscular cutaneous nerves at the seat of constriction. On section the epidermis was seen to be dipping down quite to the bottom of the sulcus, which at its deepest parts was firmly adhesive to the tendon sheaths. The cause or nature of ainhum seems to be very obscure, and I certainly would not venture to suggest any. Dr. Manson speaks of the cases being most often found in Central Africa; it is certainly rare among the natives of India. Several medical men of long residence there who saw this case stated it to be the first they had seen. I am indebted to Mr. Owen Jones, an officer in this company, for the accompanying sketches of the case.

SS. *Pekin*.

ACUTE GASTRIC PARALYSIS.

BY E. GERALD MARCH, M.D. BRUX., F.R.C.S. EDIN., &c.

DEEMING the following details of a post-mortem examination I recently had the opportunity of making interesting and instructive from the point of view of diagnosis and treatment, I have ventured to put them on record in the columns of THE LANCET. The body was that of a girl twenty years of age, who had suffered all her life from epilepsy, in addition to having a strong epileptic family history.

The history of the case is as follows. I was called in one evening to see the patient after she had had a fit, which her friends described as similar to those she had had before. There was no reason to doubt that it was epileptic. She was in a state of apparent collapse, screaming with pain, which she referred to the abdomen, and incessantly retching, though she brought nothing up. There was not much to guide me about the abdomen save that it was tender. She continued in great agony and died in two hours. On opening the abdomen I found the stomach enormously distended, occupying quite half of the whole abdomen and burrowing behind the heart, which was displaced markedly forwards. Except shape it reminded me of a volvulus of the sigmoid; it contained about two pints of dark liquid almost without odour; the mucous coat was covered with tough mucus, but otherwise it was not much changed and did not suggest a history of long catarrh. The other organs were healthy.

This case seems to me to illustrate the importance of opening the abdomen in all sudden cases of collapse obviously abdominal (the patient would, I think, have been able to withstand the effects of an anæsthetic when I first saw her), and had this been done her life would probably have been saved.

Muswell-hill.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF TRAUMATIC INTRA-PERITONEAL HÆMORRHAGE WITHOUT EXTERNAL WOUND; HÆMATOTHORAX; RECOVERY; REMARKS.

(Under the care of Mr. W. H. BATTLE.)

CASES such as the following are rare even in the wards of our large hospitals, and we consider the publication of the one given here, although it was mentioned in the discussion at the last meeting of the Clinical Society of London, will prove of interest to a large circle of our readers. Sir Spencer Wells once said: "Abdominal surgery, though not without claims to the credit of having done good service to humanity, must still be looked upon as a branch of our science and art which,

still important, calls for continued search for truth and for constant efforts to improve methods of practice from every surgical standpoint." There are, perhaps, few departments in which we require more knowledge than in that of abdominal injury, especially when there has been no wound of the soft parts and life is threatened by "internal hæmorrhage." It is, however, one in which there is but little to guide us, and a perusal of much of the literature on the subject causes surprise that the clinical notes of most of the cases are so incomplete. In by far the larger number, even of recent date, the state of the abdomen as to the presence or absence of dulness on percussion, or other signs which might give an estimate of the amount of free fluid in the peritoneal cavity, is not given. The general symptoms of hæmorrhage are mentioned, and then we are told that a large quantity of blood was found at the operation, and occasionally surprise is expressed at the large amount discovered. In Mr. Robson's case,[1] recently brought to the notice of the Clinical Society of London, where recovery followed operation, the presence and extent of dulness as indicating the amount of effused blood are noted, but only about two pints were removed at the operation. His patient was a boy, so also was Dr. McBurney's patient.[2] In the latter the injury was caused by a fall across a railway line; this was followed by profound shock and pain in the back. Eight hours later, when operation was performed, there was also flatulent distension of the abdomen with dulness in the flanks, but the shock was lessening. About a quart of blood was removed from the peritoneum, extravasation had occurred in the colon and omentum, and a branch of the pancreatico-duodenal artery was found to have been ruptured; it was still bleeding and was secured by a ligature. In the case of a boy twelve years of age, published by Mr. Page,[3] the injury was also caused by a fall across a line of rails. No source for the large loss of blood which followed could be found at the operation; the symptoms, however, pointed to the spleen, and at the necropsy it was found to have been lacerated. Doubt has been expressed regarding the possibility of the onset of a peritonitis as a result of hæmorrhage into the peritoneum. From his experiments on peritonitis, related to the sixty-second Congress of German Naturalists, Orth[4] came to the conclusion that pure blood in considerable quantities was sufficient to set up peritonitis, not so much from the presence of bacteria as from the development of some fibrin ferment. The subject is too large, however, for us to deal with it in this department of THE LANCET. We give references below to which those who wish to do so can refer.[5] The following account is taken from the notes of Mr. Dickson, the house surgeon, and Mr. Warner, dresser to the case.

A schoolboy aged twelve was admitted to St. Thomas's Hospital on Sept. 21st, 1894, suffering from shock and pain in the abdomen. After leaving school in the morning he was playing leap-frog when he missed the boy over whom he was jumping and fell on his face on the asphalte pavement of the school-ground. He walked home with assistance, but was sick after getting there. The bowels acted soon, and he passed a good quantity of urine. He was admitted to hospital about four hours after the accident. When examined in the casualty department he was found to be in a collapsed condition, and was very pale and cold, the pulse being slow and weak. A little brandy was given him, and when he rallied he complained of pain in the abdomen, but nothing abnormal could be felt. One of the incisor teeth of the upper jaw had been broken, and the boy was bleeding from his nose. When examined soon afterwards in bed the abdomen offered some resistance to palpation, and there was dulness on percussion in the left flank and hypochondriac region. The temperature was 97·2° F. Hot bottles and hot blankets were applied. Mr. Battle saw him at 6 P.M. He was then lying on his left side; he presented a white face and had dilated pupils, but no expression of pain or anxiety; he kept very quiet. The lips were paler than natural, but not blanched; the surface of the arms and face was cold. The tongue was moist, but somewhat pale. He made no complaint of pain, but when asked he said that his stomach hurt him. The abdomen moved with respiration and the walls were flaccid, rather "sagging" towards the bed; there was no tenderness anywhere. The dulness of the liver was not increased; there was dulness extending from the left flank up to the left linea semilunaris, changing with position. The pulse was feeble and at times could hardly be felt. He was very thirsty. He had vomited since admission, but there was no special tendency to vomit. At 10 P.M. a catheter had been passed into the bladder, but no urine was drawn off; later about half an ounce was passed, but it contained neither blood nor albumen. The pulse was a little stronger, the collapse had improved but very slightly, and the extremities were still very cold. At 11 P.M. there had been some increase in the amount of dulness, which reached the right linea semilunaris. At 12 midnight the general aspect of pallor continued with thirst, but the amount of fluid in the abdomen was apparently not increasing, or was doing so very slowly. The general condition had improved; his arms and face were warm. The temperature was 98° and the pulse 96. On Sept. 22nd it was noted that during the night he had passed about ten ounces of urine loaded with urates. His extremities were warm and the cheeks slightly flushed. He complained of a little pain in the abdomen, but was unable to localise it. During the night he had taken small quantities of water. At 8 A.M. the temperature was 97·6° and at 12 midnight 100·2°. The condition of the abdomen remained as before. On the 23rd there was less evidence of fluid in the abdomen. The pulse was 100. He complained of pain in the left shoulder and clavicular region on breathing. The morning temperature was 99·2° and in the evening it was 100·2°; the pulse was 110. On the 24th he was still complaining of pain in the left side of the chest and was suffering much from dyspnœa, the alæ nasi working rapidly. The respirations were 40 and the pulse 120. Dr. Box examined him and reported that there was apparently consolidation of the lower lobe of the left lung with fluid in the pleura. Albumose was present in large quantity in the urine. The evening temperature was 101·8°. On the 25th it was reported that the signs were as before, but there was no albumose in the urine. The pulse was 120, the respiration was 40, and the temperature was in the morning 101·2° and in the evening 102·2°; the pulse was 125. He was complaining of headache. The bowels acted after a simple enema. On the 26th, when lying on his back, there was slight dulness in the right flank, and the dulness on the left side reached to a line drawn vertically upwards from the anterior superior iliac spine. The respirations were 40, whilst the temperature was in the morning 101·4° and in the evening 102·2°. On the 28th the patient was feeling much better; the temperature was 99·4° and the pulse 120. The left pleura was aspirated and fourteen ounces of fluid of dark-red colour were withdrawn, being alkaline in reaction and containing red and white blood corpuscles. On the 29th he was without pain. The temperature was 98·4° and the pulse 80. There was dulness over the lower part of the thorax on the left side and slight dulness in the left flank. He went to the Swanley Convalescent Home on Oct. 10th. He was still pallid, but otherwise gave no evidence of anything abnormal. The temperature was normal or subnormal after the 29th.

Remarks by Mr. BATTLE.—When I first saw the patient he was suffering from severe shock, and it was not possible to gauge the exact extent to which the fall alone was responsible for this. In hospital practice cases of severe shock are frequently seen after abdominal injury even when the local evidence of damage is comparatively slight. There was here a complication—namely, that of effusion into the peritoneum—which suggested that much of the patient's serious condition might be dependent on internal bleeding, and it was difficult at once to estimate the gravity of this symptom. When first examined by me at 6 P.M. the condition was one to cause anxiety, but the more important symptoms of hæmorrhage were not combined with those of shock; he had vomited but little, was very thirsty, and complained of a dry mouth, but was lying quietly on his left side, and was in no way excitable or restless. The fluid in the peritoneum slowly increased, but without addition to the general symptoms, until about 12 midnight, when there was no longer necessity for immediate interference as the effusion was not increasing. The presence of free fluid in the peritoneal cavity within a few hours after an injury suggests either escape of urine, the result of a ruptured bladder, or hæmorrhage. It was necessary to exclude the former in this case, for at the time of the accident the patient's bladder had not

[1] THE LANCET, Jan. 19th, 1895.
[2] New York Medical Journal, 1889, vol. i., p. 106.
[3] Transactions of the Clinical Society of London, 1892, p. 172.
[4] Ibid. p. 177; also Centralblatt für Klinik, 1889, p. 849.
[5] James: Australasian Medical Journal, p. 357, 1887. Carson: Journal of American Medical Association, 1887, p. 577. Packard: Boston Medical and Surgical Journal, 1887, p. 445. Morton: Journal of American Medical Association, 1890, 1-16. Vautrin: Revue Médicale de l'Est, Nancy, 1894, p. 97. Dorange: Archives de Médecine et Pharmacologie Militaires, Paris, 1894, p. 223. Boiffin: Association Française de Chirurgie, 1893, p. 323. Du Bourg: Gazette des Hôpitaux de Toulouse, 1892, vol., p. 149.

been emptied for some hours, and was probably distended. He could not tell us if he had passed urine since, nor was there anyone who knew; however, the introduction of a catheter showed that the bladder was intact. Free hæmorrhage into the peritoneum without external wound after traumatism is most likely dependent upon laceration of the liver, and such lacerations, especially if of small size, are very difficult to diagnose, sometimes indeed impossible. Rupture of a healthy spleen is almost unknown at this age. Laceration of the mesentery suggested itself, or laceration of the omentum, and of these the former is the more likely to tear. There was a complete absence of symptoms of ruptured liver or spleen, and the small amount of abdominal pain, the slight vomiting, and the absence of rigidity of the abdominal wall made me regard the case as probably one of slight rupture of the mesentery without injury to the intestine. Abdominal section should, I think, be performed if the shock from which the patient is suffering is considerable and the amount of blood in the peritoneum large, or if the shock, whatever its degree, is increasing in spite of the employment of the usual remedies, and continued escape of blood into the peritoneum is taking place. When there is no evidence that the source of the blood is a rupture of one of the viscera, it is permissible to make a longer delay. Here, also, there should be distinct evidence of *increasing effusion*, and it is not always necessary to search for the bleeding point, although it is desirable that such should be secured if found easily. It is not easy to measure the amount of fluid in the peritoneal cavity and its rate of increase unless the patient be examined always on the side. In this position the pelvis is emptied to a great extent, and it is easy to mark the line of advancing dulness due to the effusion on the abdominal wall and estimate the rapidity of its escape from the lesion. It has on former occasions been pointed out that excessive shock should not be considered as contraindicating operation, as by means of saline infusion the patient may be brought into a condition for the necessary procedures when it is a question of vital importance that the hæmorrhage should be arrested by surgical means. I do not think that the question of operation is settled when the hæmorrhage has stopped, though there is generally rapid absorption of the effusion, for a quantity of blood in the peritoneum may cause inflammation from the changes which ensue. One of the first signs which may be called unfavourable will then be a commencing distension of the abdomen, and this should be regarded as an important indication for interference. The constant desire of the boy to lie on the left side was difficult of explanation, until the onset of the pneumonia made it evident that there had been injury to the left side of the chest in addition to the injury of the abdomen. There were no symptoms of laceration of the lung when he was admitted, but the presence of the hæmatothorax and the later inflammatory attack make it evident that such must have occurred, although probably of limited extent.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Varieties of Intestinal Obstruction dependent on Gall-stones, with a series of cases.

AN ordinary meeting of this society was held on Jan. 22nd, the President, Mr. HUTCHINSON, F.R.S., being in the chair.

Mr. MAYO ROBSON read a paper on the Varieties of Intestinal Obstruction dependent on Gall-stones. He remarked that the usually accepted form of obstruction was only one of four varieties of intestinal obstruction depending on gall-stones, which he proposed to classify as follows:—1. The form dependent on local peritonitis in the region of the gall-bladder, leading to paralysis of the bowel. Two illustrative cases were related, both of which yielded to general treatment without operation. 2. Volvulus of the small intestine dependent either on the violence of the colic caused by an attack of cholelithiasis or on the contortions induced by the passage of a large concretion through the small intestine. Two cases were related in which Mr. Robson performed laparotomy and untwisted the volvulus, recovery following in each case. 3. Mechanical obstruction due to the passage of a large concretion through the small intestine. Two instances were given in which enterotomy with removal of the concretion was followed by recovery. 4. Obstruction depending on adhesions or on stricture, the result of past gall-stone attacks, or of healing fistulæ. As this form was specific only in the antecedent cause instances were only referred to and not related, since cases of this kind could be more fully discussed in a paper dealing with the subject generally. Mr. Robson, in answer to questions addressed to members of the staff or to the registrars of a number of large metropolitan and provincial hospitals, had received communications from institutions representing about 80,000 patients, and out of this number only four cases of intestinal obstruction from gall-stones had been recorded during the past twelve months, proving that this form of obstruction is far from common, and all the four cases coming under the third form described in his paper seem to prove that it is the commonest.

Mr. ARBUTHNOT LANE, in connexion with the first class of cases, quoted an instance in which he had operated for acute intestinal obstruction in which he found the distended gall-bladder pressing upon the colon and duodenum.

Mr. ARTHUR BARKER cited a case seen by him post mortem in which copious diarrhœa preceded for some time the vomiting which ushered in the fatal termination. The obstruction was in the lower part of the ileum, and the case was recorded in the Transactions of the Clinical Society about sixteen years ago. The only other case with which he was familiar was one operated upon by Mr. Thomas Smith, who cut into the bowel and removed the stone, the patient making an excellent recovery. He did not approve of needling the stone through the bowel wall, and considered that shyness about opening either the large or small bowel was carried a great deal too far. He then recounted a case of volvulus, the cause of which was obscure, upon which he had operated with a good result. He had thought since that this might be due to gall-stones, and asked Mr. Robson whether in these cases he had met with effusion into the peritoneal cavity, it being a point of great practical and pathological importance whether the bowel might be so long twisted as to allow the passage of septic matter through its walls.

Mr. EDGAR WILLETT said that in the St. Bartholomew's Hospital Museum there was preserved a gall-stone four inches in circumference impacted in intestine; also the sutured portion from which a stone had been removed in a patient who subsequently died from a second obstruction. The specimen showed excellent union along the line of suture.

Mr. J. JACKSON CLARKE said that out of 800 post-mortem examinations he could recall only one in which he had seen a gall-stone impacted in the small intestine. It was two inches long and half an inch across.

Mr. F. S. EVE referred to one case of gall-stone impacted in the large intestine in the Museum of the Royal College of Surgeons of England, and suggested that some of the cases cited might have recovered if left alone. He quoted 20 cases collected by Mr. Treves which had not been operated upon, of which 6 recovered and 14 died. Of 26 cases which had been operated on 10 recovered and 16 died. Up to 1889, of 8 cases operated upon 7 died; whereas subsequently to that date, of 18 cases operated upon 9 recovered, showing a very great improvement in recent years.

Mr. CROFT said cases of obstruction from gall stone were very rare. His own observations had not led him to differ from the opinion expressed.

The PRESIDENT said he was disappointed that no attempt had been made by Mr. Robson to collate the successful cases in recent years. For himself he would say that up to the present time one half the cases died after operation, and he did not think the subject had advanced to the point at which it could be said that "delay in such a case is criminal." Even in cases where death was threatening he thought the chances of recovery were about equal to those of a fatal issue if operation was decided against. In his own experience of obstruction a large number of cases exhibiting very severe symptoms improved spontaneously, and large gall-stones could be shown which had passed the bowel without assistance. He quoted one case which on the ninth day when apparently *in extremis* was relieved by the passage of the stone; while one operated on under similar conditions died. Another objection to the rule in favour of operating in these cases was that in the hands of less experienced surgeons the mortality would probably be greatly in excess of what it was at present. The third class of cases

he thought did not support the contention in favour of operating. There was one important class which had not been alluded to—viz., cases in which a gall-stone remained for months in the intestine, giving rise to repeated attacks of obstruction. He mentioned two cases of this kind, both of which recovered, passing the stone without assistance. He further stated that he had never yet in the post-mortem room seen a case where an impacted stone had caused death.

Mr. MAYO ROBSON, in reply, said that the statement to which the President had taken exception only applied to a particular instance, and was not intended for a general rule. That desperate cases of impaction did recover he freely admitted, but thought that some cases which died might have been saved if operated upon before tympanites appeared. With regard to the second class, in which volvulus occurred, recovery was scarcely possible without operation. He thought that statistics prior to the last two years could not be accepted as giving any idea of results as they might be obtained now, and still less as representing what he anticipated in the near future. He quite agreed that were the operation performed by all surgeons as a routine treatment there might be an increased mortality. In answer to Mr. Lane, he thought volvulus was due to the violence of intestinal contraction when a large stone was passing or obstructing the bowel. He had operated on four cases, in two of which a stone was obstructing the small intestine and was associated with some peritoneal effusion.

HUNTERIAN SOCIETY.

The Operative Treatment of Perityphlitis.

AN ordinary meeting of this society was held at the London Institution on Jan. 9th, Mr. CHARTERS J. SYMONDS, President, being in the chair.

Mr. SYMONDS read a paper entitled "The Operative Treatment of Perityphlitis." The paper was founded upon twenty-three cases which had come under his care for surgical treatment. Questions of surgical import only were dealt with, and the important question, When should operation be undertaken? Mr. Symonds stated that the cases were necessarily divided into two groups: (1) those in which operation had been performed in the quiescent stage for relapsing typhlitis, and (2) those in the acute suppurating condition. The first group included six cases. The following are briefly the notes of each. Case A is reported in full in the Clinical Society's Transactions for 1885. The patient had had several attacks of colic during the six months before the removal by operation of a calculus from a cavity outside the appendix. The peritoneal cavity was not opened. Mr. Symonds now exhibited the calculus removed in July, 1883, and stated his belief that this was the first case of perityphlitis operated upon in the quiescent stage. The calculus was composed of calcium phosphate and fæcal matter, and the question was whether such a calculus could have formed in six months. In two other of the six cases a calculus was also found on operation. In one, Case B, there had been symptoms of colic for two years. The calculus rested in a cavity outside the appendix and presented a laminated appearance similar to that of Case A. In Case C a calculus of similar size and form was removed from a cavity in the iliac fossa. In this case the cæcum was adherent to the abdominal walls, and a fæcal fistula resulted from sloughing of the intestinal walls and still persisted. The patient had suffered from typhoid fever one year and enteritis three months before admission. Before operation there was a small area of exquisite tenderness in the lower part of the right rectus muscle. The symptoms in these three cases were of three, six, and twenty-four months' duration respectively from the first attack. Case D, a female, had had two attacks, the first twelve and the second two months before admission, with an ill-defined right iliac swelling and pain on walking. The abdomen was opened, the appendix removed, and perfect recovery resulted. Case E, a girl aged eight, had had a first attack five years ago, when three years of age. With quiet and care she had no second attack till 1893. The patient came under Mr. Symonds' care during a third attack, when a tumour could be felt at the brim of the pelvis. The appendix at the operation was found to be hanging down into the pelvis and adherent to the rectum. It was removed, and the patient did well. Case F was a student who had had two attacks and in whom at operation a mass of white lymph was found adherent to the iliacus muscle and to two coils of ileum. The appendix and omentum were removed, and recovery resulted. Thus in these six cases four had had two attacks, one had had great pain and inability to work after a first attack, and in one the attacks had been frequent. Mr. Symonds would ask the questions—Ought we to operate after one attack, even if severe? Ought we to advise operation after a second attack? And, thirdly, if in suppurating cases the appendix could not be found, should the peritoneal cavity be opened if necessary in order to find and remove the appendix? He next detailed the method of closure of the divided appendix. Operation had been performed in seventeen acute cases. He stated it was important to estimate the initial severity. He considered that if the attack was not very severe or very sudden the prognosis was good so long as the swelling continued firm. Many cases recovered from the first and from the second attack. Mr. Symonds drew attention to the fact that the quantity of pus was in no way proportionate to the amount of swelling, and narrated one of his cases where the swelling was enormous, reaching above the umbilicus, and contained only one drachm of foul pus. The usual symptoms were sudden onset of pain, with or without sickness, or diarrhœa, with or without pain, with or without sickness, and with subsequent development of tumour. Case G, a female, experienced sudden pain in the right hypochondriac and inguinal regions one month after confinement. The temperature varied between 99° and 102° F. On the tenth day there was a well-defined swelling in the right inguinal region, with hectic symptoms. An incision yielded one ounce of pus, and an entire detached appendix, contained in a large cavity. Mr. Symonds said that five out of the twenty-three cases presented hectic temperature with anorexia and gradual development of the swelling. Of these five cases all but one recovered, and in that case the abscess ruptured on the thirteenth day. This patient was at first not very acutely ill, but was suddenly taken with severe pain and diarrhœa and collapse. Mr. Symonds advised operation where a tumour existed which continued to increase in spite of rest, and where the temperature rose and the tumour continued to increase in size. In another group of cases there might be an abscess in an abnormal position. The notes were read of a case where, with violent abdominal pain and tenderness, there appeared on the fifth day a small tender swelling in the cæcal region, which was demonstrated by operation to be an abscess between the ileum and cæcum. He next referred to a fourth group of cases where, with abdominal distension and septic pyrexia, no tumour was palpable. He pointed out the great value of the presence of slight œdema over the loin as an indication of the presence of deep-seated suppuration. In two cases a large abscess had been completely masked by the abdominal tympanites. He therefore advised operation where the symptoms were severe and persisted if the abdomen was tympanitic. As to the justifiability of operation during the early stages of the disease, Mr. Symonds pointed out that in two of his cases operation had been performed twenty-two and twenty-nine hours after the onset of symptoms. In one purulent peritonitis was found and death resulted. The other was admitted into hospital in a state of collapse, and operation revealed a localised abscess, which was drained with good result. Mr. Symonds considered that the danger of operation was much increased by the removal of the appendix when an abscess existed. In none of his cases of abscess was the appendix searched for.

Mr. COTMAN asked the President to what extent he was in the habit of prescribing opium in these cases, and stated his opinion that opium merely masked the symptoms.

Dr. FORTESCUE FOX asked whether Mr. Symonds considered it possible that a distended appendix might discharge itself into the cæcum and so the abscess be discharged per anum, and narrated a case which supported this hypothesis.

Dr. F. J. SMITH said he had never yet seen a calculus in an appendix vermiformis at all resembling the one shown. He considered that the sudden onset of abdominal pain with vomiting and iliac tumour was an absolutely certain sign of pus and compelled operation.

Sir HUGH BEEVOR said he had seen six cases where sudden pain, vomiting, and tumour had all been present and the patients were all living although no operation had been performed.

Mr. SYMONDS said that in his opinion the less opium given the better. In a few cases he advised five grains of Dover's powder to be taken three times daily. He could not explain

the rapid subsidence of the tumour in Dr. Fortescue Fox's case. He firmly believed that every case which suppurated never recurred.

HARVEIAN SOCIETY OF LONDON.

Presidential Address: Evolution in Treatment from 1831 to 1895. (A Sketch.)

A MEETING of this society was held on Jan. 17th, when Mr. G. EASTES delivered the following address.

[After alluding to the vast changes that had taken place in the metropolis since the year of the foundation of the Harveian Society (1831). Mr. Eastes continued]:

"All branches of medicine have participated in our recent strides in knowledge, but it is impossible for me to survey more than a minute part of so wide a domain, and I select the division of prevention and treatment of disease for two reasons. It is perhaps the department of medical work that most nearly concerns the world in general; it is also the goal whither the studies and researches of all departments of medicine lead. But even here I must restrict myself to a portion only of the subject—viz., the evolution in some of the opinions held as to treatment which has occurred within the life-time of our society. In 1831 preventive medicine, except in the case of vaccination, was non-existent. Anyone ill of an infectious disease remained at home; neighbours ran in promiscuously to visit the sick person, and the disease was spread broadcast. Nurses and medical practitioners went from case to case without attempt to avoid the spread of infection. But to-day notification, isolation, and disinfection are rigidly enforced, and the sanitary defects of an infected house are remedied. Everyone knows, too, that preventable diseases may be spread by infected water or milk, every food or drink is judged, and filters themselves are not above suspicion. 'Quis custodiet ipsos custodes?' As a practical policy, too, personal cleanliness is displacing the vexatious quarantine of the past in other lands besides our own, which in sanitary matters has pioneered humanity; though it was not until after the horrors of cholera in England in 1849, and those of the Crimean winter campaign in 1855, that much progress was made even here. One consequence of all this preventive activity has been the well-known decrease in the zymotic death-rate of England and Wales, which from an average of 3·46 in the twenty years 1846–66 fell to 2·43 in the following twenty years. This is a decrease of 30 per cent., though the general death-rate fell only 3 per cent. in the same period. Since 1886, too, the decline in the zymotic death-rate has been accentuated; but a similar result obtains wherever preventive measures are adopted. In India, for example, 'whereas in 1865 not one single town had a supply of pure water, in 1894 nearly all the largest cities and cantonments had well-planned waterworks, completed or in progress,' with the result 'that the death-rate among the British troops has been reduced from 69 to 15 per 1000.' This beneficial change may be partly 'attributed to more rational methods of medical treatment and to improved nursing,' but doubtless is chiefly due to lessened prevalence of epidemic diseases brought about by better sanitation. Treatment has undergone a development since 1831 so vast that it may almost be described as a revolution. 'Fas est et ab hoste doceri'; practitioners saw that patients recovered under treatment by infinitesimal doses, and therefore naturally concluded that recovery would equally ensue with no medication at all, but with simple nursing and careful dieting. This view reached its climax when Gull and Sutton, before the days of salicin and its derivatives, treated acute rheumatism with strict nursing and dieting and the administration of peppermint-water as a placebo. The pendulum of treatment for this particular disease thus swung from over-medication to no medication at all; since then I believe it has reverted to the happy mean between the two extremes. There is, however, another side to the question: Do we now unduly neglect the heroic remedies of the past—venesection, for example? I fear that my esteemed friend Dr. Hare—who with Sir John Erichsen[1] was our president in 1847–48, and both of whom we may congratulate on their present vigour, as well as the latter on his recently-acquired honours,—I fear that Dr. Hare considers *laissez faire* is too much the order of the day. In 'good remedies out of fashion' he graphically describes the care of a gentleman who, with commencing general bronchitis and overtaxed and distended right heart—clearly an extreme case—dies without any attempt at relief by venesection. But this is just the case in which all modern books of treatment urge the 'letting of blood,' and against such treatment there is no law. There was, too, fifty or sixty years ago, less recognition than in the present day of the immense control exerted by mind over matter, of the intellectual and other powers of the brain over the body. This view has been constantly insisted upon in this society; never more happily or thoroughly than by Dr. Goodhart in his Harveian Lectures on 'Modern Neuroses,' or by Mr. Herbert Page in his recent admirable lectures on 'Some Disorders of Nervous Function due to Injury and Shock.' Some patients may be, as it were, coaxed, but cannot be driven to health. He is a wise practitioner who acts upon that principle. Another distinguishing feature of modern treatment is its definiteness in aim and precision of application, qualities that have grown slowly but surely as knowledge generally has advanced, but which, in the case of surgery, have been fostered by the introduction and adoption of anæsthetics and antiseptics. On the wonderful *rôle* played by these two nineteenth-century developments I need not dilate; their efficacy and far-reaching effects are seen on every side, their praise is in all mouths. They have completely revolutionised our practice, especially in the direction of transferring to the domain of surgery cases that thirty years ago were never seen in surgical wards. The serous cavities are opened and their contents examined; diseased parts or even entire organs, such as kidney, ovaries, and uterus, are removed; calculi and tumours taken from the deepest organs or cavities and ulcerated patches of stomach or intestines excised; whilst ligature of the carotid artery for ingravescent apoplexy has lately been practised with success. Truly the physicians must look to their laurels, since that 'hinterland' of disease always hitherto recognised as being within their 'sphere of influence' is undergoing appropriation by an advancing victorious power. One chief element of success, especially in many of these severe abdominal operations, is a point which seems sometimes to be overlooked, but was much emphasised by Mr. Bryant a few years since in his Harveian Lectures—viz., to operate directly the operation is recognised as necessary, and not allow the case to drift and thereby become irremediable."

[After discussing the effects of such discoveries as the anæsthetic power of chloroform and the antiseptic influences of certain drugs, Mr. Eastes continued:]

"But not even to anæsthetics and antiseptics combined is due all the precision of modern treatment. I believe a very large part of its progress may be traced to the teachings of Mr. John Hilton. It is a delight to me to make this statement here, because to Mr. Hilton's philosophical instruction and common-sense views of disease I, in common with other Guy's men of my day, have been indebted for much of any insight into illness that may have accompanied us through life, and for much of the pleasure which our work has in consequence brought to us. And we feel deeply indebted to Mr. Jacobson for the charming biographical notice of our great teacher which he has lately published. Mr. Hilton, I believe, first taught systematically the true significance of pain and its interpretation, and placed the principle of treatment of diseased parts by physiological rest on a basis which, since it is founded on the general laws of physiology in health and disease, will be as enduring as treatment itself. The only valid objection I ever heard made to this principle has been when it had been continued too long, and adhesions (as in the case of joints that had been inflamed) had formed. Of its immense use in many cases, surgical or medical, all of us might doubtless quote instances. I have here notes of a surgical case, but have not time to read it. For a medical instance of the value of physiological rest in the treatment of suitable cases, one might cite a case of pericarditis, where lessening of the rate of cardiac beats is essential. As Dr. Sibson pointed out, a reduction of the heart's action by 14 beats in the minute (a reduction attainable in many cases by change from the sitting to the recumbent posture) is equal in twenty-four hours to a diminution of fully 20,000 beats of the heart, and is itself a wonderful relief to the overburdened organ. I now pass to the final stage of my theme, and propose to indicate briefly the effects to the public and to the

[1] Mr. Eastes read a letter from Sir J. E. Erichsen containing the following paragraph: "I remember perfectly well having been President of the society in conjunction with Dr. Hare about the year 1847–48—I may state that there were always two presidents in those days: one medical, one surgical—and bringing to one of the meetings of the society a bottle of chloroform, which had then just been introduced into surgical practice as an anæsthetic, and was then, I believe, called the 'terchloride of formyle,' or by some equally barbarous name."

profession respectively of the progress that treatment has undergone. To the public it has been advantageous in every way, in consequence of the incidence of illness being less frequent, its accompanying pain and sorrow mitigated, duration shortened, and results less disastrous. Amongst these results is a lowered death-rate, especially from infectious diseases, which notoriously cut off in their youth or prime those who, with life before them, are amongst the most valuable items of a population. Upon the profession, in this country at any rate, the effects of the steady progress have been many and far-reaching, and are divisible into three classes, affecting us—(1) in our preparation for the conflict with disease, (2) whilst engaged in that conflict, and (3) in the results thus accruing to us. With more to learn and examinations ever increasing in severity, the intellectual status of members of the profession generally has arisen and is rising. The unskilled 'tinker of deteriorated human pots and pans' of past days has become the cultured 'wise physician skilled our wounds to heal' of to-day. The widening sphere of science and art has, however, become too extensive for any single mind to grasp it thoroughly in all directions, and is largely accountable for the division of labour, the specialising that now flourishes everywhere. The rapid growth of this tendency is well shown by the fact that when the British Medical Association met in 1833 in Bristol in the second year of its existence its whole business was transacted in one general meeting. But last year, at the meeting in the same city, the papers and discussions were divided amongst ten sections, whilst for the scientific work of the approaching meeting in London fourteen sections have been provided, and there are, I know, those who desire even that number to be increased.

"One point in reference to modern progress I would much emphasise—viz., that our increasing mastery over disease gives added zest to work, and the more frequent recovery of patients augments much our 'pleasures of life.' And although there is on one side a lessened number of cases of illness and lessened average length of illness—which remark applies both to medicine and surgery—yet other cases that formerly died at an early stage of disease, or after accident, now pass through an illness to health, so that our work is possibly not diminished, but merely displaced. It is not, I opine, from improvements in treatment, but from other causes, especially overcrowding of our ranks and consequent over-competition for practice, from which the profession as a body suffers. But, even were it otherwise, were our means of livelihood actually restricted by the very advances in our art that we ourselves have made, yet we must remember that the self-sacrificing 'struggle for the life of others' has in no branch of human labour been more apparent than in the ranks of medicine, nor here has it ever shone more brightly than at the present moment. May the same generous spirit continue through all time to animate those who practise the divine art of healing."

The new President, Sir JOHN WILLIAMS, Bart., was then inducted into the chair by Mr. Eastes and he declared the conversazione opened. The rooms were most tastefully decorated and Mr. Oppenheimer's valuable collection of Roman and Etruscan antiquities, including Pompeian surgical instruments, was on view. There were also several hundred medical and surgical books published previously to the present century and a great number of exquisite photographs of British and foreign health resorts, all kindly lent by members and friends of the society, of whom about 300 were present during the evening.

The following are the officers for the ensuing year: President: Sir John Williams, Bart. Vice-Presidents: Mr. Rayley Owen, Mr. D'Arcy Power, Dr. W. Hill, Dr. E. Clifford Beale. Treasurer: Mr. H. Cripps Lawrence. Hon. secretaries: Mr. Peyton Beale, Dr. Cagney. Council: Dr. Boxall, Mr. Henry Davis, Mr. G. Eastes, Dr. Charles Gross, Mr. W. F. Hazel, Mr. S. Hurbutt, Mr. Henry Juler, Mr. Howard Marsh, Mr. Malcolm Morris, Mr. E. W. Roughton, Dr. J. E. Squire, and Dr. Samuel West.

PLYMOUTH MEDICAL SOCIETY.

Glaucoma.

A MEETING of this society was held on Dec. 29th, 1894.

Mr. J. ELLIOT SQUARE (hon. treasurer) read a paper on Glaucoma. He pointed out the serious nature of this disease, which frequently went unrecognised until treatment was of little avail, often under the impression that the disease was cataract, and, therefore, not requiring immediate operation. He urged the necessity of every practitioner receiving some training in ophthalmology so as to recognise this disease early. He paid a tribute to von Helmholtz and von Graefe, and cited the latter's views on the subject, more especially as to the cupping of the disc. Paracentesis of the anterior chamber (Mackenzie) and iridectomy (von Graefe) were discussed and the pathology of the disease gone into, three varieties of cupping of the disc being described. Three forms of the disease were mentioned: primary or acute, simple or chronic, and secondary glaucoma. Eserine with or without cocaine to relieve the prodromal symptoms and an early and ample iridectomy were strongly urged, if possible in an upward direction to obtain a cosmetic result. In eyes blind from chronic glaucoma in elderly people Mr. Square recommended excision of the globe. To illustrate his remarks he demonstrated two cases of glaucoma on which he had performed iridectomy with excellent results.

Charcot's Disease.—Hydrocephalic Brain.—Radical Cure of Left Inguinal Hernia.—Malignant Disease of the Œsophagus.—Exhibition of Specimens.

A clinical evening was held in the library on Jan. 16th, Mr. SQUARE (President) being in the chair.

Mr. WOOLLCOMBE showed a man forty-two years of age with well-marked Charcot's Disease of the Right Knee-joint. Fourteen years ago he fell and developed synovitis, which got well and remained so until six months ago, when the right knee began to slowly enlarge, accompanied by anasarca of the same leg. The tibia was partially dislocated backwards on the femoral condyles, and so accounting for the œdema of the leg. Many of the symptoms of tabes dorsalis were well marked, but there were no crises. Suggestions for treatment were invited.

Mr. WOOLLCOMBE also exhibited the Brain of a Hydrocephalic Child three months old. The child was born with a spina bifida, which was tapped, injected, and disappeared within a few days of birth, followed a month later by enlargement of the head; the lower limbs remained contracted and undeveloped. The occipital bone was trephined three weeks ago to the right of the external protuberance, and thirteen ounces of fluid were drawn off and a small drain introduced. Continuous drainage was kept up, but the child died suddenly at the end of the third week. Post mortem there was no meningitis, and the posterior horn of the right lateral ventricle was found to have been tapped.

Mr. LUCY brought forward a case of Radical Cure of a Left Inguinal Hernia in a man sixty-seven years of age. The operation was performed a year ago at the close of herniotomy for strangulation, and an excellent result was obtained by Mitchell Banks' method. Six weeks' rest in bed were enforced, and the patient now wore a light double truss, chiefly to keep up a reducible rupture on the opposite side.

Mr. BULTEEL exhibited a Malignant Growth—probably a Scirrhus arising from a Bartholini's gland—which he had removed from the vulva of a multipara forty-eight years of age. There were no enlarged glands.

Mr. WHITEFORD mentioned a case of Malignant Disease of the Œsophagus opposite the cricoid cartilage, with enlarged glands along the greater curvature of the stomach, and asked if this sequence were usual.

Mr. BRENTON showed a Salivary Calculus, the size of a large pea, which he had removed from the duct of the left sublingual gland of a man fifty-four years of age.

PATHOLOGICAL SOCIETY OF MANCHESTER.

Pathological Changes in Chronic Rheumatism and Chronic Gout in the Hands.—Exhibition of Specimens.

A MEETING of this society was held on Wednesday, Jan. 16th, Professor SHERIDAN DELÉPINE, M.B., President, being in the chair.

Dr. E. S. REYNOLDS mentioned some points of difference in the Pathological Changes found in the hands in cases of Chronic Rheumatism and Chronic Rheumatoid Arthritis (classed together), as compared with those found in the hands in Chronic Gout. In chronic rheumatic conditions, as a rule, the lesions are found in symmetrical joints to an equal extent, and the deformities produced are similar, though the last

is not always the case. In chronic gout, on the contrary, the changes in the hands are found in asymmetrical joints to an extent differing much on the two sides, the resulting deformities being totally different. These points were illustrated by a series of lantern slides.

Mr. J. B. WOLSTENHOLME showed microscopic specimens from a case of Biliary Cirrhosis in a horse, the condition having presented no symptoms during life. He also showed a horse's stomach studded with the larvæ of œstrus equi.—Dr. A. T. WILKINSON showed a specimen of Epithelial Carcinoma taken from the bladder of a man aged sixty-two years, who died from independent cardiac disease. There were pain and hæmorrhage for sixteen days before death, but prior to this no symptoms were present. The growth infiltrated the bladder walls, especially at the fundus, and there was also a large tuberous growth projecting into the organ. There were no secondary growths in any other part. The points of interest in the case were the wide extent of the growth consistent with clinical latency; the fact that infiltrating and non-ulcerating primary carcinoma in hollow organs not normally sensitive often fails to produce pain; the sudden and serious hæmorrhage owing to the superficial vascularity, which appeared to be a superadded element; and the absence of any decided cachexia, the disease occurring in an organ in which absorption is at a minimum, and diffusion of the growth rarely occurs at an early age.—Dr. SOUTHAM showed a specimen of Perforating Ulcer of the Cæcum from a man aged sixty-seven years who for some months had suffered from symptoms of incomplete intestinal obstruction. Shortly after admission into hospital death took place very suddenly, and at the necropsy a stercoral ulcer was found on the posterior wall of the cæcum, with a small perforation at its centre. The appendix was healthy, but the cæcum and colon were distended with hardened fæces, apparently due to atony of the bowel, for no cause of obstruction was present below.—Professor SHERIDAN DELÉPINE showed a culture of a Chromogenic Bacillus (non-pathogenic) isolated from the Manchester water.—Dr. HELME showed an Ovarian Cyst.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Relation between Death from Measles and House Conditions.—The Disruption of Impacted Biliary Calculi.—Exhibition of Cases and Specimens.

A MEETING of this society was held on Jan. 11th, Dr. A. G. BARRS being in the chair.

Dr. SPOTTISWOODE CAMERON read a paper on the Relation between Death from Measles and House Conditions, which is printed in our present issue.—Dr. CHURTON, in discussing the paper, remarked that he had for many years been observing the influence of insanitary conditions on the course of diseases, and referred to notes of fifty instances where houses demonstrated to be in an insanitary condition had contributed cases of various ailments to the different charitable institutions of the town, and in which such contributions had ceased on the houses being put in a satisfactory condition.—Mr. TEALE referred to the influence of insanitary conditions on puerperal and scarlet fevers, which in his opinion were formerly much more fatal.—Mr. WOODCOCK expressed his opinion very strongly, and from personal experience, that the sanitary conditions prevailing in back-to-back houses were much more satisfactory than those prevailing in "through" houses occupied by people of the same social scale, largely on the ground that in the latter the front door was habitually kept shut and the front room used only on very special occasions.—Dr. CHADWICK gave Mr. Woodcock his cordial support, and stated that hitherto the comparisons between the sanitary conditions of back-to-back and through houses had been stultified by the relative poverty of those who lived in the former.—Dr. HELLIER and Dr. BARRS also took part in the discussion.

Mr. T. PRIDGIN TEALE read a paper on the Disruption of Impacted Biliary Calculi, including three cases in which a gall-stone in the common duct was broken up by the needle. After speaking of various methods adopted by himself and others in dealing with calculi in the cystic duct three cases were related in which a gall-stone of firm consistence, obstructing the common duct and causing jaundice, was broken up by means of an acupuncture needle. The first case was that of a man aged sixty-two who had been jaundiced for several months, and with some intermission for twelve months. At the end of six weeks jaundice had disappeared and he was well. The second case was that of a woman aged thirty-eight who had been deeply jaundiced for two months and with absence of bile from the evacuations for three months. An extremely hard calculus was broken up by the needle with great difficulty. She died on the third day. In the third case a calculus broken up by the needle did not pass down into the bowel but upwards into the gall-bladder, whence the fragments were washed out by the syringe over a period of three weeks. Jaundice persisted and yet about three ounces of bile escaped daily through the opening in the gall-bladder. The patient recovered her health and nutrition although the jaundice persisted.—Dr. BARRS spoke of the difficulty of making a diagnosis in some cases and referred to the case of a man he had seen with jaundice due to a distended gall-bladder. The patient was operated on and died soon after. At the necropsy no definite cause was found for the symptoms.—Dr. CHURTON thought severe pain was more often associated with calculus in the cystic duct than in the common duct. He spoke of the value of small doses of pilocarpine for the relief of the irritation of the skin associated with jaundice; this had been a prominent symptom in Mr. Teale's third case before the operation.—Mr. LITTLEWOOD thought the methods of crushing a stone with the fingers or the forceps outside the ducts would be easier and not more risky than needling. He showed a case under the care of Dr. Churton, in which he had done this a month ago for an impacted stone in the cystic duct.—Mr. CANT (Lincoln) spoke of the great density of some biliary calculi, and related a case in which he had attempted to break up a biliary calculus in the intestine by means of a needle and had failed. It was removed by incising the bowel. The patient did well for a week and then died rather suddenly. No necropsy could be obtained. He thought probably the peritoneal adhesions had given way, and referred to Mr. Greig Smith's recent paper on the weakness of some of these adhesions. He had operated in cases with well-marked symptoms in which he could find nothing to account for the biliary obstruction. The patients had, however, been relieved since the operation. He thought Mr. Teale's method of needling was a safer and better procedure than crushing from outside the ducts with forceps.—Mr. TEALE replied.

The following cases, pathological specimens, &c., were shown:—

Mr. WARD: Case of Actinomycosis after one month's treatment with Potassium Iodide.

Dr. BARRS: Case of Locomotor Ataxia due to Peripheral Neuritis.

Dr. CHADWICK and Mr. LITTLEWOOD: Malignant Disease of Œsophagus which perforated into the Trachea a few hours after Gastrostomy.

Mr. LITTLEWOOD: (1) Tongue removed for Epithelioma (patient and specimen shown); (2) Lower End of Femur from a case of Acute Infective Osteo-myelitis.

Dr. GORDON SHARP: Ununited Fracture of the Femur (specimen).

Dr. CHURTON: Sections of Normal Kidney from a case of Acute Anasarca and Œdema of Lungs (child).

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

Exhibition of Cases.—Aortic Aneurysm.—Resection of the Intestine.

THE fourth meeting of the society was held on Jan. 16th, Dr. CLOUSTON, President, being in the chair.

Dr. LUNDIE showed a patient after operation for Perforating Gastric Ulcer.—Mr. CAIRD showed a patient after removal of the Vermiform Appendix.—Dr. BYROM BRAMWELL showed two boys suffering from Progressive Pseudo-hypertrophic Muscular Paralysis. Two girls in the same family had been shown last year.—Dr. MACGILLIVRAY showed a patient after operation for Empyema of the Antrum of Highmore and a case of Partial Excision of the Elbow-joint by Subperiosteal removal of the Condyles.—Dr. NORMAN WALKER showed a woman with typical Lichen of the Forearm.—Mr. CATHCART showed three Gelatine Casts of Warts

in Female Genitals which he believed to be due to a special contagious form of poison not necessarily associated with gonorrhœa. A well-marked Copaiba Rash was also illustrated with photographs and drawings.—Dr. BRAMWELL showed a man presenting the typical physiognomy of Congenital Syphilis.

Dr. ALEXANDER BRUCE read notes on an Aneurysm which had perforated into the Superior Vena Cava. The patient had been admitted to the Royal Infirmary suffering from cyanosis and breathlessness. He had suffered from a cough for some time, and a month before admission "caught cold" and one morning he noticed a blueness of the face and difficulty in breathing. On admission his face was found to be swollen and greatly cyanosed; the neck was œdematous on both sides. The jugulars were full, but did not pulsate. The skin of the thorax was of a leaden colour with distended venules and œdematous. The left side of the thorax was free from lividity, but was œdematous. The abdominal wall seemed quite normal. The upper extremities were œdematous. Dyspnœa was marked. The respiration was 32 and the pulse 104. The area of impaired percussion sound over the precordia extended from the mammary line on the right side at the level of the third rib to the mammary line on the left at the level of the fourth rib. Over the heart a peculiar continuous murmur, with a somewhat musical "swishing" sound, was heard most intense during the systole and dying away during the diastole, and heard best at the level of the third costal cartilage. At the apex both first and second sounds appeared to be normal. There was a slight impairment of the percussion sound below the spine of the scapula on the right side. After admission the patient had a very severe attack of dyspnœa. The œdema and lividity of the chest increased, though the legs remained free from œdema. The point of maximum intensity of the murmur shifted a rib higher. The patient gradually became worse. Œdema of the glottis supervened, and in spite of treatment he died eighteen days after admission. Post mortem there was marked œdema of the chest wall. The aorta showed an aneurysmal dilatation extending from the valves to the origin of the innominate artery. The aneurysm projected forward and to the right, pushing the vena cava backwards. Its size was about half that of the average closed fist. On the right and posterior aspects were two small perforations into the superior vena cava. The superior vena cava and left innominate vein were firmly bound down to the aneurysm. The superior vena cava was narrowed, partly from pressure of the aneurysm and partly from organisation in the walls over about a fourth of the circumference, the walls being adherent. The heart was almost normal. From the first there had been little doubt about the diagnosis. The localised œdema suggested at once obstruction to the superior vena cava. The nature of the obstruction was rendered evident by the existence of the murmur, with its peculiar continuous character and its limitation to the sternum and right side of thorax. The perforations into the vena cava probably took place, the one before admission and the other immediately before the alteration in the point of differential maximum intensity and the murmur.—Dr. BYROM BRAMWELL and Dr. G. A. GIBSON having spoken, Dr. BRUCE replied.

Mr. CAIRD read notes on Resection of the Intestine. He drew attention to the conditions under which the surgeon had to deal with obstruction and tumours of the intestine, dividing them into a series in which the symptoms were urgent from tendency to gangrene, and those in which there was no urgency. In the first series he advocated generally, when tumours were encountered, the formation of an artificial anus, and a secondary operation within ten days to deal with the growth. In strangulated hernia, when the elongated necrotic area lay opposite the mesentery and did not involve more than one-third of the circumference of the gut even when perforation existed, he advised the invagination of the dead area. He had treated four cases successfully by this method. Were half or the whole of the gut involved then resection and end to end continuous suturing was the best plan. He advised a free removal especially of the congested central extremity of the gut, and described the method employed in two successful cases. In obstruction by gall-stone he advocated longitudinal incision, removal, and suture. He had had two such cases, which, however, proved fatal apart from the local condition and operation. In the second series of cases he strongly advocated early diagnostic incision when doubtful, and described a case where ten years ago he had removed an extensive epithelial tumour of the ileo-cæcal valve, with three inches of ileum and six inches of colon, the patient still enjoying perfect health.—Mr. CATHCART congratulated Mr. Caird on the success of his abdominal cases. In gangrenous hernia he thought resection far more satisfactory than artificial anus.—Mr. STILES described the procedure at Professor Kocher's clinic.—Mr. WALLACE spoke, and Mr. CAIRD replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

Series of 100 Cataract Extractions.—Method of Restoring the Lower Lip after Excision for Cancer.

A MEETING of this section was held on Jan. 4th, Mr. W. THORNLEY STOKER, President, being in the chair.

Mr. J. B. STORY read a paper upon a series of 100 operations for Senile Cataract, including both complicated and uncomplicated cases. Only two eyes out of the 100 were lost—both by wound infection. In 8 cases the vision obtained was less than $\frac{6}{60}$, and 3 cases, though surgically successful, remained with only perception of light owing to pre-existing disease of other portions of the eye. In 42 cases simple extraction was done (without iridectomy). Forty-six combined extractions were done, and 12 extractions after preliminary iridectomy. Mr. Story dwelt upon the importance of thorough asepsis as the principal factor in determining the result of a cataract extraction, and stated that his experience as yet was not sufficient to enable him to decide upon the comparative merits of the simple operation and the extraction combined with iridectomy. The section advocated by Mr. Story was the 3 mm. flap as proposed by De Wecker, and first performed in this country by Mr. Story in 1879.—Mr. SWANZY thanked Mr. Story for his paper. He had done 270 operations, not taking into account traumatic cataracts, and had only had two cases of suppuration, both of which had occurred in the first 100 cases. The method of antisepsis employed was as follows. The eyelids were everted and the eyes thoroughly washed with 1 in 10,000 corrosive sublimate. Any solutions, as those of atropine or eserine, were made up with the same solution. The instruments were sterilised by boiling and then put into a bath of weak carbolic lotion, from which they were taken. The dressings were also dipped in corrosive sublimate solution and oil silk put over them to prevent them drying.—Mr. STORY, in reply, said that the antiseptics employed by Mr. Swanzy were much the same as his except that corrosive sublimate solution was used instead of boiled boric acid solution.

Mr. JOHN LENTAIGNE read a paper describing a method of restoring the Lower Lip and the Soft Parts covering the Chin which he had employed in four cases of advanced Cancer of these parts, with exceptionally satisfactory results from an æsthetic point of view, and, so far as he had been able to learn, without any recurrence of disease. The operation consisted in removing the diseased tissues in a square piece between vertical incisions—one on each side and a horizontal incision below parallel to the free border of the lip. These three incisions must be carried through perfectly sound tissues only, and at least a quarter of an inch of apparently sound tissue should everywhere lie between them and the nearest margin of the diseased mass. In this way the position of the incisions would vary with the extent of the disease. The flap which was to form the new lip was then taken from the tissues under the chin and on the upper part of the front of the neck by prolonging the two vertical incisions downwards as far as might be necessary and dissecting off the quadrilateral flap between them. This was then drawn upwards to form the new lip and front of the chin and was fixed *in situ* by wire sutures, a drainage-tube having first been inserted in the middle line at the centre of the lowest part of the flap so as to allow of free drainage from the pouch under the chin. The head should be bent towards the sternum and fixed in that position until the flap became firmly adherent in its new position. When preparing his paper he had learned for the first time that the principle of the operation was not new; it had been long before introduced by the great French surgeon Chopart, and was described in many French text-books on operative surgery as the "procédé de Chopart," but there was no mention of it, or anything like it, in any English work that he had seen.—

The PRESIDENT said that he had never seen a better restoration of the lip than the one exhibited, which was done by Mr. Lentaigne by this method. He would, however, hardly accept it as a universal method.—Mr. LENTAIGNE said he did not mean that this operation should supersede all others. It was only required where the whole lower lip was diseased. The material used for dressing was gauze and wood wool, which was changed as soon as it was soaked, and then a flannel bandage with starch, which fixed the part.

SECTION OF MEDICINE.

Case of Locomotor Ataxia due to Injury.—Small-pox.—Small-pox Temperatures.

A meeting of this section was held on Friday, Jan. 11th, Dr. WALTER G. SMITH, President, being in the chair.

Dr. CRAIG exhibited a patient and read a short paper on Locomotor Ataxia due to Injury.

Dr. O'CARROLL read a paper on the Diagnosis and Prognosis of Small-pox, based upon the experience of cases treated in the Hardwicke Hospital during the present epidemic in Dublin and the much smaller epidemic of 1887-8.

Dr. H. C. DRURY, in his contribution on Some Small-pox Temperatures, exhibited a series of temperature charts of variola cases. He divided them into three classes—1. Those with primary and distinct secondary fever. 2. Those in which the initial fever was continued into a period of febrile state, of longer or shorter duration, but without any distinctive character. 3. Those in which the high initial temperature, lasting three or four days, was the only one seen. He pointed out that, from a large number of observations, he was unable to draw any conclusions from the temperature as to the severity of the rash, general symptoms, or length of time till convalescence was complete, as all three classes of temperature were seen in unvaccinated as well as vaccinated cases, mild and exceedingly severe or even fatal cases, or cases in which the rash was confluent or discrete, copious or slight in amount, also in cases that could be considered free from infection in three weeks, or in others that would require from two to three months.—Dr. TWEEDY said he thought that a good many cases of small-pox were passed off as chicken-pox. He had seen a child aged seven years covered with a discrete vesicular eruption, most of the vesicles being umbilicated. He was told that there were several children in a neighbouring house who had been similarly affected, and had run about all the time. He was in doubt as to whether it was a case of variola or varicella, but concluded that it was the former, and sent the case to hospital.—Mr. BURGESS said that in 1887 he was asked to see a case which another medical man first considered to be rheumatic fever and then scarlet fever. When he saw it he could not make up his mind what it was, but he waited for a couple of days, and by that time there was a distinct rash. This was the first case of the epidemic of 1887.—Dr. DAY said that in the early diagnosis between small-pox and chicken-pox the eruption of the throat was an important point. In the former a papule might be present on the soft or hard palate or on the tongue. In chicken-pox it was a vesicle. A woman had been treated in the Fever Hospital, Cork-street, for small-pox who was six months pregnant and yet did not abort. Several children were treated for both scarlet fever and small-pox at the same time. The acute cases of scarlet fever seemed to have escaped. He said he believed that chicken-pox occurred in adults and also that the vesicles were umbilicated.—Mr. Horne, Dr. Parsons, Dr. J. W. Moore, Mr. A. N. Montgomery, Dr. Smith, and Dr. O'Carroll having also spoken, Dr. Drury replied.

HOSPITAL SATURDAY FUND.—The board of delegates of the Hospital Saturday Fund held a special meeting on Jan. 19th, at which it was reported that the total receipts for the past year were rather over £20,000. It was resolved that £17 600 be divided among 165 institutions as follows:—To 30 general hospitals, £6202; to 63 special hospitals, £6392; to 35 dispensaries, £1063; to 17 convalescent homes, £1497; to 18 miscellaneous institutions, £2151. A sum of £95 was awarded to the Chelsea Hospital for Women, but was not to be paid over until the managing body of the Hospital Saturday Fund were satisfied that the reforms specified in the official report had been carried out. In like manner a sum of £63 was awarded to the Queen's Jubilee Hospital, to be paid after the refutation of various charges made against that hospital.

Reviews and Notices of Books.

A Text-book of the Diseases of Women. By HENRY J. GARRIGUES, A.M., M.D., Professor of Obstetrics in the New York Post-graduate Medical School and Hospital, &c. Containing 310 engravings and coloured plates. London: Henry Kimpton. 1894.

THE author has aimed at writing a practical work, and he has therefore endeavoured as far as possible to avoid theoretical discussions, and he has treated the pathology of the subject very briefly. The object kept more especially in view has been to teach the reader how to make a diagnosis and how to treat the different diseases. We cannot see that any apology is needed for devoting special chapters to hæmorrhage and leucorrhœa, though the author expressly anticipates some adverse criticism for doing so. Indeed, in a work of a practical character there is a decided advantage in the arrangement he has adopted. There are so many morbid conditions peculiar to women in which the discharge of blood, other than that occurring normally during menstruation, is a significant symptom, that it is no fault to give considerable space to its discussion; we should rather think that it has here been scarcely as fully treated as it deserves to be. We may observe, by the way, that the extreme shortness of some of the so-called chapters is a remarkable feature of the book. Thus, chapters of half a page or two-thirds of a page occur more than once. The chapter on Metrorrhagia consists of less than seven lines. In the chapter on Dysmenorrhœa we see that the obstructive theory still finds favour, as we read that "the cervical canal may be too narrow, especially at the internal or external os (stenosis)"; and, again, it is stated that "the uterus may be so bent that the crookedness of its canal opposes a barrier to the free outflow of the blood." In speaking of the treatment of menorrhagia it is recommended that if the use of vaginal douches of hot water fail, liquor ferri chloridi may be added to the water. We scarcely see how *vaginal* douches containing perchloride of iron can be efficacious in the treatment of *uterine* hæmorrhage. For the repair of the various kinds of laceration of the perineum three operations are described, some one of which the author thinks will be found suited for any case. They are Tait's flap-splitting operation, a modified form of Hegar's colpo-perineorrhaphy, and Emmet's operation. We observe that in one of the figures describing the second of these operations the lettering has been left out, and the description is therefore more or less difficult to understand. The author considers Tait's operation to be by far the most expeditious perineorrhaphy, and that it results in the formation of a thick and broad beam between the anus and vulva. In speaking of the treatment for hæmatometra and hæmatocolpos we find that after making an opening washing out of the uterus is recommended. The general opinion in this country is that it is better to leave the fluid to drain away entirely without assistance. Operative interference for fibroids should, in the author's opinion, only be resorted to in cases where Apostoli's treatment has been tried unsuccessfully. Many would consider that the prognosis of an operation undertaken under these conditions was much graver than if performed without any preliminary disturbance (and possibly infection) of the endometrium. In the description of carcinoma of the cervix we find it stated that "often the mucous membrane of the body [of the uterus] is affected at an early date in cases of carcinoma of the cervix." So far from this "often" being the case, we should say it is so rare that many good English authorities doubt its occurrence. We are, of course, speaking of the disease at an early stage of its progress. It seems a pity to confuse carcinoma of the body of the uterus with carcinoma of the cervix. The natural history of the two diseases is very different; but in speaking of the age at

which carcinoma of the uterus may be expected, the author simply states that "carcinoma of the uterus is a disease of advanced age." We think in a book intended partly for students it would have been advisable to emphasise the fact that cancer of the cervix is not at all uncommon in relatively young women. It is interesting to see that, according to the statistics of Charleston, cancer of the uterus is about as common among the black as among the white population, which is contrary to the general impression. In speaking of the prognosis the author is undoubtedly mistaken in teaching that even the most radical treatment effects only quite exceptionally a permanent cure, and that it is even doubtful if it prolongs life. He does not seem familiar with some of the English statistics on this subject, which go to show that if the disease is treated radically before it has reached too advanced a stage "permanent cure," if by that is meant many years without recurrence, is not in such cases at all exceptional, either in cancer of the body or cancer of the cervix. We suppose that we must take it that Dr. Garrigues' book offers us a fair picture of American gynæcology at the present time. If that is so, while gladly acknowledging the advances made by American workers in various parts of the subject, we think there is a considerable field for reform in the direction of attaching less importance to the presence of slight displacements or to doubtful stenosis at the internal or external os; and it would be something gained if the formidable two-bladed dilator (p. 153) used for dilatation or "divulsion" of the cervix could be relegated to the limbo of obsolete instruments. We wonder if the author has seen a note by Auvard on perforation of the uterus by the curette, in which he showed that as a rule the curette merely *discovered* a rent in the uterus caused by the previous use of the dilator in question.

LIBRARY TABLE.

Practical Lectures in Dermatology. By C. W. CUTLER, M.S., M.D., Professor of Dermatology, University of Vermont. New York: G. P. Putnam's Sons. 1894.—The author tells us that he has published these lectures in response to the request of the students to whom they were delivered. There being only fourteen lectures, he has restricted himself to "those diseases of the skin which every physician in general practice should be able to diagnose and to treat in an intelligent manner." He also tells us that they are prepared from stenographic notes, which may account for the style being colloquial, but he also aims at being humorous. While this is doubtless pardonable as a means of attracting the attention of students during the delivery of a lecture, elaborate jokes, such as that on Elisha's baldness and bear's grease, are but poor reading, and take up a good deal of space which might have been better employed. The lectures contain necessarily much that is true without being new, and the information given, though sound on the whole, is rather scanty, even for the 230 pages to which the author has restricted himself. While the lectures may have been useful to the students for whom they were intended, they are too sketchy, we think, to prove of much value to the more experienced reader. The work concludes with a reprint of Jackson's well-known "Dermatological Don'ts," to which Dr. Cutler (still in humorous vein, it is to be hoped) adds the admonition not to omit to purchase his own work on Diagnosis!

Asthma and Chronic Bronchitis. By JOHN C. THOROWGOOD, M.D., F.R.C.P. Lond. London: Baillière, Tindall, and Cox. 1894.—This monograph is practically a revised and much extended edition of the author's Lettsomian Lectures, which gave in concise and practical form his experiences upon asthma. The subject is one which has great interest, physiological as well as clinical, and, above all, therapeutical. It has been the field of many arguments and hypotheses, but that the cause of the asthmatic paroxysm is bronchiolar spasm, although often contested, is the theory that best accords with the facts of its occurrence, with its known relationships to other affections and with the action of remedies upon it. This view, so ably maintained by Hyde Salter in the monograph which remains to this day the most interesting and the most erudite work on the subject, is that adopted by Dr. Thorowgood, who, however, has not omitted to review other explanations or to refer to some of the relationships of the affection which have been brought into prominence since Hyde Salter wrote. Chief amongst these additions stand the writings of Schmiegelow and others upon the association of asthma with nasal polypi and other nasal affections. That there is a definite relationship between them is certain, but the tendency to magnify it beyond reason has, we fear, been the source of disappointment to many a sufferer, besides leading to much unnecessary local treatment of the nasal mucous membrane. The author of this work does not fall into such an error. He views the subject from the wider standpoint of the general physician, and has succeeded in producing a book which exhibits sound judgment upon the problems of the disease, besides containing much valuable advice upon the management of its different forms.

A Healthy Home. By FRANCIS VACHER, F.R.C.S. Edin., County Medical Officer for Cheshire. London: William Rider and Son, Limited. 1894.—This book will be welcomed by the numerous class who desire to consult some practical and trustworthy guide in matters of house construction and domestic drainage and water-supply. At the outset the author assumes that the reader contemplates the erection of a small house, and accordingly provides plans, sections, elevations, and descriptions of various styles of such a building, ranging from a labourer's cottage to a small villa residence having a rental of about £40 a year. In the opening chapters questions of site, soil, aspect, building materials, and construction are discussed at considerable length. Much of this is, of course, inapplicable to the case of the dweller in a city or of a purchaser of an existing house, and probably some would prefer a curtailment of the early chapters and an extension of those which treat of warming, lighting, ventilation, hot and cold water supply, and sanitary requisites. In like manner one of the chapters ("How to keep the House Clean") condescends to such minutiæ as the proper method of washing plates and cleaning knives and forks, instead of which many heads of houses would probably rather have advice in the selection of kitchen ranges and other cooking apparatus, the setting of wash-house boilers, and the clearing of drains which have become choked. Unfortunately there is no reference whatever to the explosions of circulating kitchen boilers, which are such a frequent cause of serious disaster during frosty weather. On p. 131 there is a caution against exposing the pipes to frost, but the reality of the danger deserves more emphatic treatment. The author, however, presents a large amount of information in a convenient form, and the majority of readers will find in the book much that is new to them and of real practical value.

First Lessons in Hand and Eye Training, or Manual Work for Boys and Girls. By GUSTAV KALB, of the Leipzig Lehrerbildungsanstalt (Training College for Teachers). Translated by W. G. FIELD, M.A. London: O. Newmann and Co. 1894.—*Manual Training made serviceable to the School.* By Dr. WOLDEMAR GOETZE, Director of the Leipzig Lehrerbildungsanstalt. Translated by W. G. FIELD, M.A. London: O. Newmann and Co. 1894.—For many years past protests have been made in various quarters that modern popular education is too literary in its methods and aims, and that children whose vocation in life will undoubtedly be manual

labour of some kind or other find themselves on leaving school unnecessarily conversant with grammatical subtleties, essay-writing, algebra, and so forth. Of course, instruction in such subjects is an admirable thing in itself, but the time bestowed and the mental bias temporarily imparted are clearly anomalous in the case of a very large proportion of the pupils at an elementary school. In such learners the development of the practical and mechanical faculties is a prime necessity, and the two volumes under consideration will be found very useful aids by teachers engaged in such work. The "Hand and Eye Training" begins with Fröbel's "building box" of bricks and cubes, suitable for children of six or seven years of age, and continues the instruction by numerous devices in folded and plaited paper, modelling in plastilina or clay, and outlining of geometrical solids, until the method of making simple Christmas-tree ornaments is taught. Cardboard boxes and baskets and small wooden articles come next in order, and the volume concludes with easy examples of work for the fret-saw and chip-carving. "Manual Training" is a more advanced work than the last mentioned. It commences with cardboard as a material, and passes on to articles made of wood, sheet metal, and wire. Most of the objects on which the pupils are employed serve for illustrating elementary physics, and among the concluding ones is a simple electro-motor. The general plan and arrangement of the volumes are excellent.

Précis Iconographique d'Anatomie Normale de l'Œil. ("Globe Oculaire et Nerf Optique.") Par le Dr. ROCHON-DUVIGNEAUD. pp. 136. Paris: Société d'Éditions Scientifiques. 1895.—This *brochure* is a complement to the ordinary descriptions of the anatomy of the eye contained in the text-books, and is, in fact, a *résumé* of the author's own researches in little out-of-the-way bits and corners of the eye and its appendages. A drawing is given in each case, from his own preparation, which serves to illustrate the observations he has made. Commencing with transverse and longitudinal sections of the optic nerve, which contain nothing worthy of special notice, he proceeds to give a section and an account of the pupillary region, several sections and an account of the ciliary region, transverse vertical sections of the anterior portion of the ciliary processes, of the angle of the iris, of the choroid, of the iris, of the retina, and of embryonic eyes, which last are perhaps the best in the book. We notice nothing particularly new or striking, but the work is conscientiously done. The author observes, correctly enough, that the ciliary processes are not so much folds as laminæ; he accepts a dilator iridis muscle, but observes that the muscle fibres are quite identical with those of unstriated muscle elsewhere. The suspensory ligament of the lens is not a membrane, but a series of fibres. He comments on the extreme thinness of the walls of the choroidal veins. The division of the choroid into layers is inaccurate. He makes no remark upon the glands of Nicati, Collins, and others in the ciliary processes.

JOURNALS AND REVIEWS.

The Journal of Physiology. Edited by MICHAEL FOSTER, F.R.S., and J. N. LANGLEY, F.R.S. Vol. xvii., No. 5. Dec. 15th, 1894.—The memoirs contained in this part are 1. The Time Relations of the Voluntary Tetanus in Man, with a Plate by Dr. David Fraser Harris. 2. On the Response of the Chick Before and After Hatching to Changes of External Temperature, with four Woodcuts, by Dr. Pembrey, Mr. Gordon, and Mr. Warren. 3. Hæmato-Porphyrin in Normal Urine, by Dr. Archibald Garrod. 4. A Simple Form of Gas Pump, with a Woodcut, by Dr. Leonard Hill. 5. On the Action of Certain Substances on the Hearts of Daphniæ, by Mr. J. W. Pickering. 6. On the Comparative Antiseptic Action of the Phenyl-substituted Fatty Acids, by Mr. J. Parry Laws, F.I.C. 8. On the Effects of the Kneading of Muscles upon the Circulation, Local and General, by Dr. T. Lauder Brunton and Dr. F. W. Tunnicliffe. 8. Further Researches on Eye Movements, by Dr. J. S. Risien Russell. 9. Note on the Oxidising Powers of Different Regions of the Spectrum in relation to the Bactericidal Action of Light and Air, by Mr. R. F. D'Arcy and Mr. W. B. Hardy. The part also contains the Proceedings of the Physiological Society at the last two meetings.

The Ophthalmic Review. Edited by Mr. J. B. LAWFORD, Dr. N. M. MACLEHOSE, Dr. K. GROSSMAN, Mr. PRIESTLEY SMITH, Dr. JOHN STORY, and Dr. JACKSON. Vol. xiii., No. 157, Nov., 1894. London: Messrs. J. & A. Churchill.—Mr. Ernest Clarke communicates in the present number of this journal a paper on the Association of Blepharitis and Ametropia, with analysis of 100 cases, in which he insists on the importance, in the treatment of these cases, of the use of glasses adapted to correct the errors of refraction that are almost invariably present. Dr. Kenneth Scott, of Cairo, recommends, in a paper on a new method of treatment for vascularised cornea, that each minute vessel should be slit up with the point of a Graefe's cataract knife.

The Quarterly Journal of Microscopical Science. Edited by Professors E. RAY LANKESTER, ADAM SEDGWICK, and W. F. R. WELDON. Vol. xxxvii., Part 2, No. 146. London: J. & A. Churchill. 1894.—This part contains five essays, all written by Mr. Richard Assheton. 1. A Re-investigation into the Early Stages of the Development of the Rabbit, with five plates, containing many figures. 2. On the Phenomenon of the Fusion of the Epiblastic Layers in the Rabbit and in the Frog, with one plate. 3. On the Causes which lead to the Attachment of the Mammalian Embryo to the Walls of the Uterus, with one plate. 4. The Primitive Streak of the Rabbit; the Causes which may determine its Shape, and the Part of the Embryo formed by its Activity, with three plates. 5 On the Growth in Length of the Frog Embryo, with ten plates. The essays reflect much credit on Mr. Assheton's assiduity. He discusses each subject from a thoroughly independent point of view.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—At a meeting of this society held on Jan 16 h, Dr. J. S. Tew, President, in the chair, Dr. Carroll read a paper on House Sanitation and gave a lantern demonstration. The points dealt with were the following: the site, aspect, and materials used in house building; the necessity for a damp-proof course in house walls and of a layer of concrete under house floors; the sanitary arrangements of dwellings—ventilation, drains, traps, waterclosets, privies, ashpits, cesspools, water-supply, and storage of rain water; the different forms of ventilation, methods of laying house drains, making levels, constructing privies, cesspools, and closets, and sources of pollution of drinking water; effective and defective traps and the necessity of ventilating drains and soil pipes; methods of disconnecting sinks, tanks, and lavatories; pan closets, short hopper and waste-water closets, and the great advantages of the waste-water closet over the ordinary watercloset in cottage property; the right and the wrong way of constructing ashpits and privies; the dangers of pollution of the soil; diarrhœa, enteric fever, and bronchitis; tub closets being condemned as insanitary and expensive, although an improvement on the privy midden. Every dwelling-house should have proper spouting to carry off rain water and prevent it soaking into walls, foundations, and soil; the construction of soft water cisterns and pollution of the water through faulty construction, settlements, &c.; the exclusion of soot, leaves, birds' droppings, &c. by a rain-water separator; the action of different waters on lead and other water-pipes; the construction of wells. There were thirty-nine slides shown of the various defects and remedies in house construction; models of drain-pipes, grease and other traps, short hopper, and slop-water closets were shown. Drs. Tew, Hunter, Watson, Tresidder, and Peskitt spoke, and Dr. Carroll replied. Two specimens of Extra-uterine Fœtation were exhibited by Dr. Watson.

THE LANCET.

LONDON: SATURDAY, JANUARY 26, 1895.

Is the Scripture about to be falsified which says, "Charity never faileth"? All agree in the supreme test of charity—that it is to be found in the sympathy with hospitals. If comfortable men—that is, men of average wealth and health—cannot deny themselves in a sensible degree to help men, women, and children who are both sick and poor there is verily something wrong either with them or with the institutions where such people are accommodated—where a bed is made for them in their sickness and all the resources of modern nursing and medicine are at their disposal. Sir WILLIAM HARCOURT must not be made the sole scapegoat. His Budget may have all the faults attributed to it by its critics; but it will not explain the increasing disproportion between the income of hospitals and their expenditure. We are not going to lose ourselves in the sea of hospital finance in which some swimmers have recently been floundering somewhat curiously. A few facts are patent enough and ought to be noted. Whole wards are closed in some of the oldest, greatest, and best hospitals. In one of the youngest a considerable proportion of the beds has been set apart for pay patients, to the exclusion, of course, of those who cannot pay and for whom this and all other hospitals were primarily built. The newspapers of any given day contain advertisements that are pitiable in their significance. Let us take the *Times* of the day on which we are writing as a specimen. Urgency is the word for the wants of St. Mary's Hospital, University College Hospital, the London Hospital, Queen Charlotte's Hospital, the Royal Free Hospital, the Royal Westminster Ophthalmic Hospital, the Margate Sea Bathing Infirmary, the Metropolitan Hospital, the Royal London Ophthalmic Hospital, St. Peter's Hospital for Stone, the Middlesex Hospital, the London Free Hospital, Guy's Hospital, and St. Thomas's Hospital. In regard to some of these institutions the note of impecuniosity is pitiful. In St. Thomas's Hospital three wards are standing empty, and two others are temporarily devoted to the reception of paying patients. In the Metropolitan Hospital accounts are "overdue" and funds needed for their payment. At the Margate Infirmary 130 beds out of 220 beds are closed for want of funds. At the Middlesex Hospital last year the income from all sources (legacies included) amounted to £20,357 and the expenditure (due to repairs &c.) to £37,184. We need not labour to show that the indebtedness of hospitals is great and unless met by increased liberality of the public likely soon to become intolerable to private persons.

We cannot contemplate the result with pleasure, believing that no hospitals are equal to English hospitals in respect of the humanity and efficiency with which the patients are treated, and being proud of the voluntary and charitable nature of the system by which they have been created and are maintained. The importance of hospitals in respect of medical education cannot be overstated, and it is insisted on in a letter which we publish to-day. But this is, after all, a secondary function and one which they would still continue to serve even if they came to depend on the State and not on private benevolence. The urgent question is, What are the causes of the declining support of hospitals? We have said that they must be found either in the public itself or in the institutions. We do not believe in any serious decline of charity.

> "In faith and hope the world will disagree,
> But all mankind's concern is charity."

The age may be luxurious and selfish, or tending towards such undesirable qualities; but we do not believe that this is so to any such extent as to explain the impecuniosity of hospitals. No doubt, too, times have been bad and forms of benevolence other than that represented by hospitals have multiplied, and their promoters are more zealous and importunate than the managers of the hospitals. But the case of the sick poor is so strong and appeals so powerfully to all men that we can only suppose that the failure to meet it depends on some defect in the way in which it is represented or on some error in the selection of fit cases. Our suggestion is that the latter is a principal cause of the decline of hospital support. The promiscuous reception of all sorts and conditions of people, the conversion of wards into hotels for the treatment of those who can pay, the monstrous development of the out-patient department, absorbing half the material that should go to make practice for the men whom the schools educate—these are the evils that chill the ardour of charity. We have long contended that they would operate so, and our contention is being verified. There is charity enough in London and the provinces, we are convinced, to meet the case of those who are overtaken with accident or exceptional disease whose homes have not accommodation for their treatment and whose means are inadequate. But a wide misgiving exists as to the fitness of the recipients—a suspicion that the poor in hospitals are being displaced by those who can pay, and that the resources of hospitals are being frittered away indiscriminately over a great unwieldy mass of people who should have their own medical man as they have their own baker or butcher.

There is one point more painful in this aspect of the hospital problem, and that is that the medical staffs of the various institutions are seriously to blame for allowing such an abuse of the hospitals. We lately referred to the authorities of Guy's Hospital inviting people to come and be treated medically, surgically, and obstetrically for three guineas a week, and advertising a public entertainment for the ventilation of such barefaced competition with medical practitioners. It is no answer to this view that the medical staff is not directly paid in such arrangements. It has the right, and it is under obligation, to protest against them. They cannot be carried out without the consent, if not the assistance, of the staff. In the case of the Great Northern Central Hospital, no doubt, the staff is more to blame for undertaking personally to treat gratuitously the patients of other medical men; but there is something in this bid for large classes of profitable cases made by Guy's Hospital, cases which constitute the very backbone of practice, which is positively startling. These are

not isolated instances. In all hospitals there is an unwarrantable cultivation of the out-patient system and a culpable laxity prevails in the admission of cases that should not be admitted into hospitals for the poor. Our columns testify week by week that the feeling of these evils is becoming intense in the profession. The columns of the newspapers show that it is affecting the flow of subscriptions. In its latter aspect it is a matter for the managers of hospitals to consider very gravely. As regards its bearing on the profession the feeling is ripening fast that something serious will have to be done. It will be unfortunate if the rank and file of the profession are not supported in their protest against these terrible evils by hospital surgeons and physicians. It cannot in the long run be for the interest of consultants to sanction a system which saps at once the very sources of medical practice and the honourable independence of the people.

THOSE members of the newly constituted United Kingdom Police Surgeons' Association who formed the deputation that waited on Mr. ASQUITH on the 17th inst. may be justly congratulated on the success of their labours. They were introduced by Mr. H. NELSON HARDY, who, in a studiously moderate speech, detailed the various grievances which they wished to lay before him. The first was the very inadequate nature of the fees and allowances granted to medical witnesses—a hardship to every medical practitioner in private practice, but specially so to police surgeons, who are, as a rule, gentlemen of experience in the profession as well as in the special duties incidental to their appointment, and whose appearance in the witness-box of all the various criminal courts is necessarily frequent. It is not necessary to give details, as these have so recently appeared in our correspondence columns. It is sufficient to observe that the fee of one guinea per diem does not fairly remunerate even those who live in towns and cities where the assizes and sessions are held, and who, after a long day in court, return home to find some hours of hard work before them before the day's labours are ended. To those living at a distance from the court the hardship is extreme. The remuneration is the same—railway fare, sometimes first-class, sometimes only second, each way, is allowed, and 2*s.* per night, though this has not always been allowed. One member of the deputation informed Mr. ASQUITH that after deducting all expenses he found himself remunerated to the extent of nine shillings! Other police surgeons less fortunate have found themselves with a balance on the wrong side. A police-surgeon, moreover, may have several cases at the same assizes and on the one day, only receiving the one fee for all. Mr. ASQUITH, while admitting the insufficiency of the fee, observed that other professional witnesses were paid the same; but he was promptly reminded by Mr. T. BOND that the cases were not parallel, medical practitioners having to attend as part of their professional duties, while in the case of a lawyer his appearance in the witness-box was an unfortunate accident. It is a long-established fact that medical practitioners are more frequently called upon as witnesses than members of any other profession. Other members of the deputation, coming from various distant parts of the country, spoke to the inadequate fees they received as witnesses and the pecuniary sacrifices from which they suffered.

The next point was the very important one of the examination of prisoners accused of criminal assaults on females. For some years past the Metropolitan Police have been furnished by the Home Office with instructions as to how these examinations are to be conducted. The instructions are addressed to the inspector on duty at the stations, and the first is this: "Every prisoner to whom this order applies must be clearly told by the inspector on duty at the station that it is proposed to examine him and that he has the right to object if he so desires, for in the absence of consent any examination would be an assault. The examination is to be made by the divisional surgeon, or in his necessary absence by a duly qualified surgeon. Where consent is given the examination should be made as soon as practicable after the prisoner is in custody and removed to the station and before he is taken before a magistrate." The orders also provide that if a prisoner consents to such examination he is to be told that if he desires the attendance of a qualified medical man on his behalf an opportunity for such attendance with the divisional surgeon will be given, and arrangements are to be made accordingly. Other orders provide for the due recording and verification of the examination and of the compliance with these rules, both by the inspector and by the divisional surgeon. It is obvious that these regulations, which are of the greatest importance, ought to be in the hands of every police surgeon throughout the kingdom. For want of such rules many have been placed in a most difficult position, while some have unwittingly committed the grave error of examining a prisoner without having obtained his consent, both prisoner and surgeon being under the impression that this was not necessary. Even learned judges are not unanimous in their opinions on this point, as was shown to the Home Secretary by one of the deputation (Mr. LOWNDES of Liverpool). Mr. ASQUITH recognised the importance of the request of the deputation that copies of these instructions should be sent to all the police authorities, and said that it would be desirable to issue a circular from the Home Office calling the attention of the various watch and standing committee throughout the country to the existence of those rules.

The third point was this. It had been found by the laborious efforts of Mr. HOPKINS of Bath, one of the honorary secretaries of the association, that there were several large counties and many towns without any regularly appointed police surgeons. Consequently, the nearest surgeon has to be called in, or anyone who may by chance be at hand. Seeing how important and responsible are the duties of police surgeons, it is obviously the duty of each local authority to appoint a surgeon specially qualified for the performance of such duties. The following counties and towns are at present without police surgeons: Anglesea, Carmarthenshire, Denbighshire, Devonshire, Durham, Northumberland, Pembrokeshire, Glamorganshire, Dorking, Echington, Holyhead, Hinckley, Lutterworth, Melton Mowbray, Newcastle-under-Lyme, Pontypridd, Salisbury, Totnes, Whitehaven, Worksop, Glastonbury, Devizes, Haverfordwest, &c.

The fourth point was that in the event of medical certifiers

of the cause of death being appointed, the interests of police surgeons should be safeguarded. In the metropolitan district the divisional surgeon or his deputy is always at hand night and day to attend to any emergency, and it is the practice of the police to call in the aid of the divisional surgeon to any sudden or violent death. A similar practice is observed in many other provincial towns and districts, though the practice is not uniform; but wherever it obtains it is said to work very fairly.

Mr. ASQUITH, in replying to the deputation, said he was glad to have heard their views on points of considerable importance, not only to the medical profession, but to the public. He had already stated what he proposed to do with regard to the very important point of the medical examination of prisoners, and he understood the proposal practically met their views. The main grievance of the deputation appeared to be that affecting the remuneration of witnesses. Now the scale under which medical men and all other professional witnesses were at present paid for attendance at court was fixed so far back as 1858, and in all substantial respects it had remained undisturbed up to the present time. He did not say that this was conclusive evidence of the convenience or justice of the scale, but the facts showed that a number of successive Secretaries of State who had held office had been afraid to burn their fingers by touching it, and he was disposed to imitate their prudent example. Mention had been made that the fee in the Isle of Man was only 15*s.* 6*d.* He had made a note of this, and hoped to get it increased to at least a guinea. He agreed with the speakers that the remuneration of a guinea for such duties was altogether inadequate if they looked upon the remuneration paid to witnesses as indemnifying them for the loss in time and money which their attendance at courts of law involved. If it were true that it was a condition of the medical profession to attend courts in a sense which could not be said of other witnesses, then the logical conclusion to his mind was not that this scale of remuneration, which was fixed by the Secretary of State for the whole of the profession, should be altered, but that medical men in their arrangements with their employers—the watch and joint committees—should endeavour to get this circumstance taken into account by these bodies in fixing the remuneration of police surgeons, and they should be asked to make a provision which would supplement the inadequate payment prescribed by the scale. He should be glad to see the police authorities of the country recognise that police surgeons were more liable from the nature of their duties to be called upon as witnesses and to be taken away from the pursuit of their private practice than other professional men. That seemed to him to be the proper way to deal with the subject. With regard to the important point that some counties and boroughs lacked police surgeons altogether, he considered that in the interests of justice and good police administration it was desirable that every police force should have attached to it some recognised accessible and generally known practitioner, not only for the purpose of attending members of the force, but who could be called in to deal with those cases which required special experience. If that course were taken probably the detection of crime would become easier and more effective than it was at present. He would consider, therefore, whether in the circular to be issued on the other point it was not desirable also to call attention to the desirability of every police force having attached to it some recognised police surgeon with a view to its more efficient administration. Referring to the question of medical certifiers of the cause of death, Mr. ASQUITH intimated that in his judgment, *primâ facie*, police surgeons were the more appropriate and were likely to be more competent persons to discharge that duty than the medical officer of health. It was, however, a matter which did not come within the authority of the Home Office, but he would take care to convey to the Local Government Board, with whom it rested, his opinion that, as a rule, this was the most rational and convenient course that could be adopted.

We fear that the local authorities will hardly appreciate Mr. ASQUITH'S "logical conclusion." His own statement that the scale of remuneration was fixed so far back as 1858, just thirty-seven years ago, is surely ample proof that it is sufficiently ancient to require revising, and if this involves the painful necessity of finger burning on the part of the Home Secretary for the time being, the sooner the painful process is ended the better. Other persons engaged in the administration of justice—learned judges, recorders, clerks of assize, associates, &c.—are reasonably and even liberally remunerated. Why should the economy be all on the side of the witnesses, and especially the medical witnesses? What could have been the intention of offering professional gentlemen 2*s.* per night, as an allowance presumably for each night's lodging, when absent from home in addition to the one guinea per day and railway fare there and back? If, moreover, a Sunday be included the witness gets no remuneration whatever for this day—an injustice which must occur not infrequently and which has endured quite long enough. Obviously those who summon the medical witness and keep him from his duties and practice for, it may be, some days ought to remunerate him reasonably, and Mr. ASQUITH'S suggestion that the local watch committees should take it into account, though at first plausible, is wholly impracticable; but, on the whole, his reply to the deputation is very satisfactory even on this point, while on the other three points nothing remains to be desired, and we repeat that the members of the deputation may be heartily congratulated. They spoke not only for all duly appointed police surgeons, but for those other members of the profession who perform these duties and are obliged to attend as medical witnesses at a remuneration which we have now official sanction for calling wholly inadequate.

THE question whether, in their selection and purchase of the Stammerham Estate near Horsham as the most appropriate site to which Christ's Hospital should be removed, the Council of this foundation have exercised a wise discretion has been much disputed. It is now some four years since the decision to remove the school from Newgate-street was arrived at in accordance with the scheme of the Charity Commissioners, under which the governors were empowered to dispose of the historic buildings and site that have been one of the most striking features of the City of London.

That the step had become a practical necessity was evidenced by the financial position of the trust, quite as much as by the general considerations of health and sanitation which have led other of the great city schools to be transferred to more open situations. The purchase of the Horsham property was first decided upon, after due consideration and inspection of alternative sites, so long ago as June, 1892. The Council had obtained opinions favourable to its selection from their surveyor and architect; but, having acquired the estate, were impelled by adverse criticism to seek further expert opinions upon the matter. Accordingly, Mr. ROGERS FIELD was commissioned to inquire into the water-supply and drainage of the property, whilst Dr. KELLY was asked to report upon the health of the locality. Their reports, which were received about twelve months ago, have been only lately made public, the Council having in the meanwhile definitely affirmed the acquisition of the site and accepted the plans of the projected buildings sent by the architects, Messrs. ASHE, WEBB, and T. INGRAM BELL. We are fain to confess, after careful perusal of the reports of Mr. ROGERS FIELD and Dr. KELLY, that the site selected is not an ideal one for the erection of a great public school; but we can quite understand that having already acquired it the Council of Christ's Hospital would naturally be loth to reopen the question and seek an alternative site, except on thorough condemnation of the Horsham property by the experts consulted. But neither of these gentlemen do condemn it; indeed, Dr. KELLY considers that the estate possesses advantages in situation and healthiness which render it suitable for the purpose for which it has been acquired. The drawbacks are stated in Mr. ROGERS FIELD'S report, wherein it is shown how they may be overcome. It is clear from his extensive inquiry that the present water-supply is inadequate and liable to contamination; and that to adapt it to the needs of the large school community who will dwell on the estate extensive resort must be had to well-boring. Similarly, as regards drainage and the disposal of sewage he clearly shows—from the analysis of the soil made by Dr. DUPRÉ—that this is mainly strong clay and therefore unsuitable for filtration and irrigation; so that the sewage will have to be subjected to artificial filtration. Moreover, before the land is in a condition suitable for the erection of the buildings it must be thoroughly underdrained. Under these circumstances it seems clear that the site is not an ideal one and also that it is not unlikely that from the health point of view it might have been possible to have found a site which possesses at least as many advantages as those pointed out by Dr. KELLY whilst being free from the drawbacks dwelt on by Mr. ROGERS FIELD. The financial question is another matter, upon which we need not here enter save to remark that Christ's Hospital can ill afford a large outlay for the purpose of remedying the natural defects of the land to which its buildings are to be transferred, and that the scheme is not free from objection on this score. At the same time, if the authorities are mindful of the recommendations that have been made to them, and set about the work in a liberal spirit, there is no sufficient reason—on the side of salubrity—against the estate being adequate for its purpose and the school buildings erected upon it being placed in a good sanitary condition. That the soil is primarily a clay one does not, on Dr. KELLY'S showing, necessarily mean that it is insalubrious; but in this matter much depends upon the efficiency with which it is drained.

ON Tuesday last the movement for promoting the formation of a Local Teaching University for London passed through one of the most important stages in its career. The creation of a teaching university in and for London is now admitted on all sides, not only to be desirable, but inevitable. The practical question is whether this teaching university should be separate from the present University, or whether the latter should be so reconstituted as to become a local teaching university as well as an Imperial examining board. The proceedings of Tuesday at Downing-street and afterwards at Burlington-gardens will do much to clear up the different views that have been entertained on the question. The scheme of the Royal Commission appointed to consider the Draft Charter for the proposed Gresham University in London was published in THE LANCET of Feb. 10th, 1894, and was absolutely opposed to the formation in London of two universities—one local and teaching; the other Imperial and merely examining—practically being the existing institution. The teaching university was to be grafted on to the examining board, and if the latter suffered it seemed to matter but little, for everyone except the graduates of the University was quite prepared, and some were even anxious, for such a result. A magnificent teaching university, according to the ardent promoters, was to be founded in London, and the "village cobbler," and, may we add, his son (according to Professor SYLVANUS THOMPSON), who is anxious to obtain a degree and improve his position by his force of intellect must stand aside and not spoil such a great conception. Of course, this is a mere idle dream. A federation of colleges, medical schools, and some other institutions will be the only outcome of the report.

There will be no real university in London until the State or the municipality, or both combined, determine to supply the funds that are necessary for such an institution. We should not brook State or municipal supervision or appointment in our British Universities; and without these we can hardly expect any of the public funds to be devoted to the creation or maintenance of a large metropolitan university. Continental comparisons lie quite beyond the discussion. On June 30th, 1894, an attempt was made to force the hands of the Government by asking for a Statutory Commission to be appointed at an early day in order to carry the proposals of the Commissioners into effect. This resolution was passed at a meeting of the delegates from the institutions affected by the scheme, with the exception that the representatives of King's College demurred to the demand for the immediate appointment of a Statutory Commission. The Convocation of the University of London had not then formally expressed any opinion on the scheme. The Government, therefore, not being able to consider the matter as non-contentious, although many of the members were known to view it favourably, took no action last session. During the recess the various bodies concerned have considered the scheme with much fuller consideration, and the result is shown by

the two deputations which waited on Lord ROSEBERY on Tuesday. The first deputation, introduced by Professor HUXLEY, consisting of the representatives of the various institutions affected by the recommendations of the Royal Commission, urged the appointment of a Statutory Commission, but they were all agreed that it should be largely unfettered as to details, that it should be open to hear representations from the various bodies interested, and that, following the lines of the Scottish Universities' Commission, there should be a right of appeal to the Privy Council. The second deputation, consisting of graduates introduced by Mr. FLETCHER MOULTON, Q.C., opposed the union of a teaching university with the existing institution, because it would have a tendency to lower the standard of degrees, damage their impartial character, and injuriously affect provincial and non-collegiate students. Lord ROSEBERY evidently sympathised with the views of the first deputation, and thought but little difficulty was presented by the question of degrees. We think that as the movement progresses more and more difficulty will be found in the adjustment of the standards for the various degrees between the collegiate and non-collegiate students, and we cannot agree for a moment with Sir JULIAN GOLDSMID that these standards will not be lowered. If they are not it is idle to suppose with Dr. ALLCHIN that any much larger proportion of London medical students will obtain the advantages of a London degree than do so at present.

Convocation by a small majority, 208 to 175, passed the resolution moved by Professor S. THOMPSON (p. 244), and by a smaller majority, 157 to 133, a second and consequential resolution. A special committee to prepare a memorandum to lay before the Statutory Commission was then appointed. Although the majority was a small one the fact that the vote in Convocation was in favour of the appointment of a Statutory Commission may determine the Government to take proceedings in the matter in the early part of the session. Lord ROSEBERY says that if a Commission be appointed it will be appointed by statute, which will give every opportunity for discussion in Parliament. Remembering the fate of the Gresham Charter, and the hostility evinced to the present scheme and expressed to the Premier at the graduates' deputation, we should advise our readers not to be too sanguine as to the formation of the local teaching university.

Annotations.

"Ne quid nimis."

THE NEW DEATH DUTIES.

THE passing of the Finance Act of last year, or, to give it its more familiar name, of Sir William Harcourt's Budget, has made an important change in the position of all persons whose expectations of property are grounded in family settlements or landed estate. The matter is, therefore, one which merits, and is receiving, careful attention at the hands of moneyed people of all classes, and it may be taken for granted that so large an alteration as has been made by it in the incidence of taxation will not take effect without giving rise to many intricate questions and knotty points of law. These will emerge in time and take time for their resolution; but the main outlines of the new scheme of taxation adopted are clear enough, and it behoves everybody who has the responsibility of making a disposition of property to take effect after his death to consider what its effect will be upon the prospects of those dependent upon him. Broadly speaking, the principle of the measure is to render land and settlements contributory to the revenue in the same manner and to the same extent as personal property. Hence it follows that property in either of these forms, which have hitherto enjoyed a relative immunity from taxation, must stand depreciated in future, and that beneficiaries whose expectations are based upon the devolution of such properties will in future find themselves to some extent disappointed of their hopes. This remark applies, of course, not only to the actual heirs and successors of the present incumbents of the properties, but also to legatees, and to residuary legatees in particular, who are liable to find their benefits cut down by the diminution of an estate in consequence of the operation of the new duties, even when the fresh impost is not directly laid upon the legacy in question. In this way the most carefully adjusted arrangements may be disturbed, and it is precisely those owners of property who have bestowed the greatest care upon their dispositions already made that now need most to reconsider their position, or rather the position of those whom they may expect to leave behind them, in order to satisfy themselves that no injustice can hereafter be done through the action of the new rules as to duty upon the old provisions of the will. There is another way in which the Budget of 1894 affects the estates of deceased persons, and this is of wider application, and even greater importance therefore, than that already glanced at. The new system has not only effected a redistribution of the burdens, but has also increased the total amount of revenue chargeable upon properties of the kind now under consideration. With certain exceptions, which need not be here considered, the new arrangement applies to all estates of upwards of £100, so that few indeed are the numbers, for instance, of our own profession who can be congratulated upon being able to look disinterestedly upon this new departure. From large estates the contribution to revenue will be very large, but even small estates, with scarcely an exception, will not escape scot-free. In some cases we are told on reliable legal authority that very great hardship will be caused to poor legatees by the way in which the rate of duty has now to be assessed. The question is one, therefore, of general interest, and one to which, although it scarcely lies within our sphere to offer advice upon it, we may usefully draw the attention of all our readers. It will be for them to consider for themselves how to act in such cases as those to which we have alluded. In some cases a visit to the lawyer will have to be prescribed; in others some special saving to meet the foreseen emergency. Where a special fund has to be created to bear the burden of the added tax it will in many cases be possible to make provision by means of a small life assurance policy, and we do not doubt that sooner or later the insurance offices, which are alert to anything that has a bearing upon business, will afford facilities for transactions of this kind. But one suggestion certainly cannot be untimely or unsound. The sooner any arrangements of this kind are made the better, for delay in such a matter involves not only the chance of total failure to make the necessary provision, but the certainty that the longer the precautionary measures are deferred the more burdensome they will eventually be.

THE GROCER'S LICENCE.

THE question of the soundness of the policy of granting "off" licences for the sale of alcoholic drinks is one by no means of the least important of the matters which will have

to be dealt with in connexion with that large measure touching the liquor laws to which both Parliament and the Government are committed; but it is hardly a question which can now be disposed of in a separate measure. The difficulty is of course practical rather than theoretical. In the abstract there is no difficulty about isolating this branch of the subject and dealing with it separately in the way either of discussion or of legislation; but in practice the difficulty is so great as to amount to an impossibility. In the first place, the position of the parties to the controversy is such that no advance, however partial, can be made without precipitating a general engagement, and with respect to this particular question of grocers' licences this statement is eminently true. The matter has been treated so essentially as a branch of some more comprehensive scheme of reform of the liquor laws that it would be idle to expect any practical politician to discuss it at the present time as a self-contained proposition. In this sense the discussion which has recently arisen may be called academic; but when the time comes for discussing the whole problem this question of the policy of affording facilities for the purchase of alcoholic liquors, which are so peculiarly liable to abuse, as those which the "off" licence confers, will open up one not only of the most difficult, but one also of the most practically important issues of the whole discussion.

DANGERS IN THE POCKET.

IF the reports in several papers last week are to be credited there may exist considerable danger, of which the public should be warned, in the act of carrying in the same pocket certain articles which are in popular request, but which together, as would appear to have been demonstrated, may form a firework ready to "go off" on the slightest provocation. Thus it seems that the simultaneous occurrence of a safety match box and chlorate of potash lozenges in the same pocket led to a series of small explosions, setting fire to the clothes of the unfortunate wearer and severely burning his legs. It is a well-known fact in chemistry, of course, that red phosphorus—one of the constituents of the safety match box rubber—combines with explosive violence with chlorate of potash; but the possibility of such a reaction taking place in a person's pocket has not been foreseen, although, on reflection, we easily see that in these materials there occur two powerful elements—oxygen and phosphorus—which simply yearn, so to speak, to combine. This effected, the lively combustion of the sugar of the lozenge would follow as a logical but very unpleasant sequence. When, therefore, a chlorate of potash lozenge is placed in the same pocket as the safety match box, the pocket is unwittingly converted into a miniature magazine for fireworks, which, if they happen to "go off," cannot certainly be for anybody's "benefit." In any case, a person commits a breach of sanitary law surely when he keeps soothing medicaments in the uncongenial company of a safety match box.

PENNY DINNERS FOR POOR CHILDREN.

SINCE the now classical experiment begun by Sir H. Peek at Rousdon in 1876 the school children's "penny dinner" movement has advanced by strides. The demand for its extension has increased the supply and has also considerably lessened even the small original cost. It will be remembered that as early as 1886 dinners costing a farthing each were provided for the poor children of Birmingham.[1] What is more remarkable, it was found that the nourishment provided at so low a rate was capable of effecting a marked improvement in the physical, mental, and even moral characteristics of the children. It may appear somewhat strange that a difficulty should have arisen at any time in connexion with the payments, but this is true nevertheless. It is explained by the fact that a large number of poor school children are, so far at least as their teachers know, destitute. To meet their deficiencies more than one plan has been suggested. Some years ago the formation of a Government subsidy for the purpose commended itself to the judgment of certain persons, and the proposal has not yet been entirely abandoned. Hitherto, however, private charity as a rule has come to aid the empty hands of these penniless learners, and accordingly free tickets, given with discrimination to the necessitous, form a part, though not a desired or intended part, of the system. We are pleased to find that this side of the subject has of late been considered with some care. Last week the National Food-supply Association convened a conference of teachers to discuss the feeding of poor children in London schools. The association is founded upon the principle that nothing shall be given away, and so far its efforts have been attended by marked success. It now provides from 14,000 to 15,000 dinners a week, and it has established depôts in the poorest metropolitan districts. Its aim is not merely to provide for want, but also by insisting on the penny, or in some cases halfpenny, payments and by teaching its own simple cookery to show the poor that they can supply themselves with plain, wholesome, and cheap food. Philanthropic persons may purchase tickets for those whom they think deserving, but there are no gratuitous doles. No sensible person will quarrel with such an arrangement. It is not so charitable as to discourage thrift. It does not exclude charity, but it refuses to confound this with business. Its method is thus an eminently rational one and superior in our opinion to any process of merely gratuitous relief. As regards the meals themselves, consisting for the most part of soup and bread, these have met with general acceptance. They are now prepared at one central depôt and issued in insulated vessels. They can thus be kept hot for many hours and supplied at a much less cost than formerly.

[1] THE LANCET, Dec. 18th, 1886.

DENTISTRY AMONG THE CHINESE.

IT would seem that in dentistry as well as in ways that are dark "the heathen Chinee is peculiar," and in the Journal of the British Dental Association for January Mr. C. Robbins has communicated some curious essays on the subject written in English by Chinese students at the Anglo-Chinese College, Foochow. They describe in quaint language the performances of the dentists, who are usually itinerants of the Sequah order. They appear to have three methods of treatment: (1) extraction, the patient's attention being distracted and his lamentations overpowered by the beating of a loud gong; (2) the application of arsenic to kill an exposed pulp; and (3) the extraction of "tooth worms." This latter operation, usually performed by women, is very frequently resorted to, and undoubtedly worms are produced from the tooth, as these amateur dentists adopt the same principle as the lithotomist in the story—who used always to provide for finding his diagnosis had been mistaken by taking a pebble of suitable size in his waistcoat pocket—and themselves introduce these worms, which are usually concealed under their long finger-nails. A Chinese student describes the operation thus; we give his own words: "Now let me advert to the practice of arresting the tooth worms. One of my relatives was once attacked by a severe cold, and after the cold was broken up by restoring activity to his skin he had a neuralgia which gave him such an intense suffering that he could neither eat nor repose, but moaned with a voice so audible and so plaintive that it sent a thrill to the heart of everyone in the house. On the second day his suffering increased to a remarkable degree; indeed, it is impossible even at this distant period to reflect without horror on the miseries of his toothache state.

Finally, he submitted to the operation of a woman dentist whose agency was to arrest tooth worms. Her general operation is as follows: a chopstick and a silver pin are the only instruments she requires in her normal act. She is willing to exhibit them to anyone who conceives an inclination of discerning her trickery. She brings the chopstick in contact with the diseased tooth and cautiously pokes it through with a pin in search of the odious worms; after a while scrapes out a lump of yellow minute worms on the chopstick and immerses it in a cup of water. Each lump consists of from ten to fifteen worms, and sometimes two or three hundred worms are scraped *if the patient makes an exact bargain at first that the fee should be defrayed according to the number of worms scraped.* The general fee is 400 cash (1*s.* 2*d.*), and only the poor may take advantage of being in penury to pay 200 cash."

THE MEDICAL SCHOOLS.

SINCE the publication of our table showing in detail the number of students who had entered upon or who were continuing their medical curricula during the session 1894-95,[1] we have received returns from the University of Edinburgh, St. Mungo's College, Glasgow, and Queen's College, Belfast. The new entries at the Edinburgh University show a total of 136, the number of students on the roll, including the fifth year and upwards, being 1213. St. Mungo's College has 21 new entries, with 25 students of the first year, 20 of the second year, 33 of the third year, and 12 of the fourth year. The total number of medical students attending Queen's College, Belfast, is 187, of whom 33 are new entries.

NEED OF NOTIFICATION AT YEOVIL.

THE Yeovil School Board have been in some difficulty owing to the fact that the town council have not adopted the Act relating to the notification of infectious diseases. They observed a falling off in attendances; they knew it was, in part at least, due to infectious sickness, and they sought the advice of the borough medical officer of health as to the significance of the facts and as to the action which they ought to take in them. But Mr. Garland explained that he could not help them. The town council gave him no means of securing accurate information as to the condition of his district as regards disease, or as to the prospects of further spread or of abatement of the current disease. The School Board then did the best they could under the circumstances. They decided to close the infants' school, and then to bring the whole matter under the notice of the town council. It remains to be seen whether the latter body will decide that for the future it is their duty to use the available means for learning what is the true sanitary state of their district, whether suspension of elementary education or other action be in question.

FUNCTIONAL GASTRIC DISORDERS.

IN the *Medical News* of Dec. 15th, 1894, Dr. C. G. Stockton draws attention to gastric disorders dependent upon functional disturbances. We quite agree with him that the question of persistent functional disorders of the stomach is not sufficiently frequently raised. In the treatment of the various forms of indigestion direction is given, as a rule, purely to an attempt to aid the gastric functions to a better performance of their duties, and sufficient attention is not paid to the cause of these disturbances. In the first place, it may be said that the functional gastric disorder is very rarely a primary trouble. In ratio to the ability to hunt down and remove the causal factor will be the success in relieving the neurosis. The stomach, like a mirror, reflects pretty nearly every influence to which the organism is subjected. Irritation of the brain, the spinal cord, the testicle, the kidney, or the liver results in anorexia, or perhaps vomiting. Grief, joy, worry, and pain lead to similar results. When there is toxæmia from constipation, or renal or cutaneous insufficiency, or other sources, it is the stomach that raises the alarm. In the cerebral anæmia of sea-sickness or of a fainting fit and in the cerebral congestion of sunstroke the gastric are in the tumultuous front of the anarchistic functions. Now, of those suffering from these various irritations—any of which, either through toxæmia or reflex disturbances, may lead to the gastric symptoms—if the stomach contents were examined there would be found no evidence of subacute gastritis, none of the "ropy mucus" which is so much talked and written about, but which those who have largely studied gastric contents usually fail to discover; but there would be found testimony that there had occurred a serious derangement in gastric innervation, exhibiting itself to some extent as excitement, to some extent as depression, and in some instances it is impracticable to say that either of these states predominates. Where will the trouble be found? The nerve irritation may be prone to be some central structural disease or persistent circulatory disturbance, or it may follow excessive mental strain, as seen in actors, school teachers, &c., or it may be, and in fact often is, accounted for by defects in the development of functional disorders. It will also be found that irritation of the spinal cord—either directly, as from pressure in lordosis, scoliosis, and other sources, or interference with innervation, as in tabes and myelitis; or indirectly, as in irritation from hysterical spine—is a common source of gastric disorder. Further than this, the mischief may be lurking in the genito-urinary apparatus. As regards the influence of toxæmia, one of the most common forms results from defects of the kidneys, either dependent upon nephritis or upon renal inadequacy. So alcohol, tobacco, coffee, and other substances may induce digestive disturbance indirectly through the blood and nervous system. Malaria, gout, and tuberculosis often offend in the same manner. Finally, Dr. Stockton lays stress upon the later phases of syphilis being a cause that has apparently passed unnoticed.

THE "NEW STREET DANGER."

THE "new street danger" is losing its novelty. In THE LANCET of Nov. 17th last there appeared comments on the accident connected with electric lighting mains in Cannon-street. Since that time Euston-road and more recently St. James's-street have each been the scene of a similar disaster. Owing to the alarm caused by the frequency and danger of such accidents, it is now proposed to present a petition to the Board of Trade that immediate steps be taken to prevent their recurrence. It is, however, difficult to believe that that Board, aware of the danger and fully informed of the facts, will delay effective action until urged forward under pressure of a public petition. It is not to be doubted—(1) that serious explosions may occur in connexion with electrical leakage in underground mains both on the high-pressure and on the low-pressure systems; (2) that in consequence of leakage from high-pressure mains into the surrounding ground men have been injured and horses killed by electric shock; and (3) that such accidents are to be regarded as "preventable." The causes that lead to them are becoming fairly well known. It is recognised that amongst the measures to avert these occurrences are to be enumerated a due regard to the kind and construction of cables, care and foresight in the laying of mains, a proper "earthing" of the outer conductor of concentric cables, efficient insulation, precautions to secure ventilation and drainage of culverts and junction boxes, and an efficient inspection of the entire system. Such accidents are to be deplored, not only on account of danger to the public, but

[1] THE LANCET, Nov. 3rd, 1894, p. 1051.

also in the interests of electric lighting. The electrical engineer is aware that long before he appeared on the scene with his cables and conduits and junction boxes a notorious gas leakage had long held possession of the ground. It lies with him to meet the difficulty, and he will doubtless prove equal to the occasion. It has been suggested that some gas other than a mixture of coal gas and air—a gas "distilled off the insulating substances" by the heated conductor—may at times be concerned in such explosions. This is possible and in some cases perhaps probable. "The man in the street," however, is not seriously concerned to know the exact nature of the explosive gas, or the genesis of the spark or arc that ignites it, neither does he claim an opinion as to whether safety is to be found in gastight junction boxes or in a return to the old method of buried mains; but in self-defence he ventures to inquire whether new regulations are needed, whether existing ones are carried out, whether Rule 15, which provides that boxes shall be kept free from water and gas, be a reasonable one, and, if so, has it been duly enforced?

DIPHTHERIA IN LONDON.

DIPHTHERIA showed further decline in its fatal form last week in London, the deaths falling from 35, 50, and 34 in the preceding three weeks to 31 last week, the per case mortality being 20 per cent. The admissions to hospital were 76, some half of the cases newly arising, against 75, 64, and 74 in the preceding three weeks. The patients remaining under treatment last Saturday were 514 in number, as compared with 517 on the Saturday before. Of the 31 deaths, 4 belonged to Chelsea, and 3 each to Fulham, St. Pancras, and Camberwell; and 17 were in children aged from one to five years. In Greater London there were 10 deaths, including 8 in West Ham and district. In 1894 there were notified 18,956 cases in the county of London, this number being at the rate of 45 per 10,000 persons living at the last census. The registered deaths were 3625, and were 1934 above the corrected decennial average. The per case mortality was 19·1 per cent. of notifications.

THE SERUM THERAPEUTICS OF PNEUMONIA.

AT the time when the attention of the medical world is directed to the serum therapeutics of diphtheria and tetanus a short review of the same method of treatment as applied to pneumonia, given in *L'Union Médicale* of Dec. 8th, 1894, may prove of interest. Numerous experiments have been made on animals, and several attempts have been made to treat patients in the same manner. Drs. F. and G. Klemperer have treated twelve cases of pneumonia with the serum of rabbits rendered artificially immune. Each dose consisted of from 5 to 10 c.c. injected under the skin of the buttock. Eliminating five of the cases in which crisis resulted as in the ordinary course of the disease, in the remaining seven each time the serum was administered there was a diminution in the height of the temperature and in the frequency of the pulse and respiration, and the patients made a good recovery. They have also injected eight patients with cultures of the pneumococcus which had been heated to 60°C. and so deprived of toxicity. The results were very satisfactory, the temperature falling soon after the injections. They also inoculated patients with the serum of other patients suffering from pneumonia obtained immediately after the crisis. After the inoculations the temperature became lower, and frequently defervescence at once followed. Foa and Carbone reported a case of pneumonia which was arrested on the fourth day after injections of the serum of a vaccinated rabbit. Foa and Scolia injected ten patients suffering from pneumonia with from 5 to 7 c.c. of the serum of rabbits which had been rendered immune, the injections being given under the skin of the back. In some of the cases as many as three injections were given; in these (four in number) the crisis appeared to be hastened. Jansen also records cases in which this treatment was adopted with success. Lava has treated ten cases of pneumonia with injections of the blood serum products obtained from the viscera of animals suffering from pneumonia. The injections produced no immediate or ulterior local reaction. There was also no immediate influence on the temperature, but the thermometric curve gradually became lower; the frequency of the pulse and respiration was diminished. Convalescence was rapid and no complications followed. Taken as a whole the above series of experiments are satisfactory, and the serum therapeutics of pneumonia deserve further trial and investigation.

"DYSPHEMIA."

THIS is the name proposed for stammering by Dr. C. F. Coxwell in a recent article in the *Intercolonial Quarterly Journal of Medicine and Surgery*. The article is important as a practical contribution to the elucidation of the cause of this troublesome affection and also its treatment, and is also interesting on account of the theoretical views, which are enunciated. Dr. Coxwell points out that stammering is the result of some interference with the oral or laryngeal mechanism of speech and a consequent want of correspondence between them. He regards it as largely a spasmodic affection, the result of inhibition, which leaves the liberating element temporarily unopposed and so gives rise to spasm. On the other hand, inhibition of the liberating element may cause temporary paralysis. In the next few pages are embodied a description of the relation of the related cerebral centres—speech and auditory—and an account of the gradual development of their functions. He next proceeds to discuss the theoretical question of local control over discharge of energy in nerve centres, and considers the question of the existence of a general inhibitory centre and the nature of neuroses generally. "Dysphemia" is then considered with reference to these theoretical considerations, and an explanation offered of its phenomena. In conclusion, there is a succinct and practical account of the various measures necessary for its successful treatment.

THE CARE OF THE SICK IN WORKHOUSES.

IN spite of repeated practical illustrations the danger of delay where health and illness are in the balance would seem to be still very imperfectly understood either by workhouse officials or by those guardians whose deputies they are. We directed attention to a case bearing upon this subject in our issue of Nov. 24th, 1894. Another example was reported last week. In this instance the sufferer was an aged inmate of Stepney Workhouse. Taken ill on Friday, the 11th inst., he died from syncope on the following Monday. During this interval of three days he received no medical treatment, but was reported by one to another of a succession of employés, till at last within a few hours of his death he saw the assistant of the visiting medical officer. Even then he had to wait another four hours before he could obtain the medicine prescribed. It is curiously suggestive of primitive methods of treatment that the needful remedies in this establishment were "all made up and ready for giving out." Stock mixtures, we admit, are efficient on occasion, but such absolute faith in their universal suitability argues, to our mind, a dangerous and unwholesome conservatism. Both the coroner and jury who investigated this case agreed in advising that such an institution as this workhouse, which at present contains nearly 800 inmates, ought to be under the supervision of a resident medical officer. Such an arrangement would no doubt prove advantageous in more ways than one. At the same time it

is to be remembered that most of our workhouses have infirmaries attached to them, and that these are usually under the control of two medical men. Thus the wants of workhouse inmates generally are already provided for more or less directly after the manner advised. What, it seems to us, is in the meantime even more urgently needful is the introduction of intelligent energy into the system hitherto employed. It is superfluous to add that any profession of method in arrangement is practically worthless while such neglect is possible as will permit a sick man to suffer unheeded for hours or days, and his treatment, when once begun, to follow the course of a slumberous routine, heedless, apparently, of either symptoms or results. Whether the ideal of actual residence be attained or not, therefore, it is clear that in some parochial unions, at least, the most obvious wants of the sick poor have not yet been provided for.

THE SOCIETY OF PUBLIC ANALYSTS.

THIS comparatively young society, of which the majority of public analysts in this country are members, now occupies a position of unquestionable importance in the public service, in that its aim and work are intimately associated with the supply of pure food and standard drugs. Since its foundation it has evidenced a very healthy activity in all matters pertaining to the Food and Drugs Adulteration Act, and has done most excellent and useful work towards raising the standard of food products, and in publishing through its organ—the *Analyst*—the result of progress in regard to the methods for the more accurate detection of adulteration, which has established it as the standard reference and guide for the analytical practitioner. At the annual meeting of the society, held at Burlington House on Wednesday, Jan. 16th, Sir Charles Cameron referred to the labours of the Parliamentary Committee and to the recommendations drawn up in the form of a Draft Bill by the council, which he hoped the committee would to a large extent be guided by. The society is urging, amongst other important reforms, for a legal provision for the laying down of authoritative standards. On these, as well as other important points, we shall look forward with interest to the evidence which is to be heard from the public analysts before the committee next session. We are glad to see that the society has appointed as president for the ensuing year Dr. Thomas Stevenson, the official analyst at the Home Office, and one of the few analytical representatives of the medical profession.

THE PROPOSED CANTONMENT ACT AMENDMENT BILL.

THE unofficial members of the Indian Medical Congress at their late meeting passed a resolution earnestly representing to the authorities in India and in this country the mischief likely to result from the proposed Cantonment Act Amendment Bill, especially as far as the third clause is concerned, which proposes penal legislation aimed at public medical servants, and implies that they cannot be trusted to loyally carry out the orders of the Government on this subject. From the telegraphic intelligence from India that has since appeared in the public journals of this country it appears that a compromise is likely to be arrived at which will probably involve the abandonment of that clause of the Cantonment Act Amendment Bill when it comes up for discussion. The clause is, in the first place, quite unnecessary, and, in the second place, it conveys a slur on the medical profession. Into the general question of the Contagious Diseases Acts it is needless to enter now. In the present state of political opinion—and until the people of this country realise the vast importance which the prevalence of this class of diseases has upon public health, and the cost and suffering which such diseases entail in the present, and all the remote consequences by which they are followed—it is not likely that any attempt will be made to deal with the subject by any legislative measures such, for example, as would without hesitation be applied in the case of any dangerous trade or calling. The magnitude of the evil, as far as our army in India is concerned, is undoubted; the facts speak for themselves and need not be exaggerated. There is no room for any difference of opinion in this respect, whatever there may be as to the most efficacious means of dealing with it that may, under the circumstances, be practically open to us to follow in a vast country like India. That something will have to be done in this direction is obvious to most people, and the subject is one for grave consideration. But this clause of the amended Cantonment Act, prohibiting under the penalty of a fine the compulsory examination of any woman by a public servant, is, as we have said, an unnecessary and under the circumstances, as it seems to us, a gratuitously improper proceeding. It is unnecessary because there is already an existing law on the subject, and the Government of India has moreover engaged not to do anything opposed to the resolution of the House of Commons and the orders of the Home Government in the matter. It is improper in that by implication it casts a slur upon the medical profession in India. The medical servants of the Government of that country are not at all more likely to do anything contrary to the laws and regulations of the Government than any other class of its servants. From the nature of their calling, however, they must be more keenly alive to the gravity and extent of the evil than other people can be.

DEATHS UNDER ANÆSTHETICS.

A RECENT death under chloroform which occurred at the Middlesex Hospital exemplifies the grave danger to the patient during that period of chloroformisation called the "struggling stage." The patient, a man of adult age and described as a hard drinker, was to be placed under chloroform in order that one of the surgeons might remove a mass of tuberculous glands in the neck. The man struggled violently during the administration of the chloroform and died suddenly. The heart was dilated and the myocardium fatty. We have no particulars as to the method employed or the phenomena exhibited at the moment when grave symptoms occurred; but it seems likely that, as so often happens, the lethal dose was taken during the deep gasping breaths always present when the patient struggles. There are in such cases two factors at least which tell against the patient—the fixation of the muscles during their spasmodic contraction (the struggling stage), which hinders the output of chloroform by impairing respiratory movements, and by the propulsion of venous blood into the thorax. A very similar case has recently occurred at the Royal Victoria Hospital at Bournemouth. The patient suffered from a fractured patella; he had taken chloroform in November of last year, but except that he struggled in going under he appeared to have done well. On Jan. 4th, however, a second operation being necessary, the man was again chloroformed and again struggled violently. The quantity of chloroform given is stated to have been one drachm, a very small quantity unless given by Junker's inhaler. However, the operation appears to have been commenced and the patient was presumably under the influence of the anæsthetic. Respiration suddenly failed and the circulation quickly ceased before resuscitation could be effected. A death under the A.C.E. mixture occurred recently at the Swansea Hospital. The patient, a young woman twenty years of age, suffering from "housemaid's knee," was anæsthetised by the A.C.E. mixture with a view to "firing" the joint. This was successfully accomplished, and after the anæsthetic had been stopped some three minutes the pulse was observed to grow weak and in a few seconds to stop. The respiration

continued for fully five minutes after this. No loss of colour was seen, although just before the cessation of the pulse the lips became congested. Nothing abnormal about the patient was found before the anæsthetic was given. She was menstruating. This sad occurrence is a very typical one of the usual onset of dangerous symptoms under the A.C.E. mixture. We are not told how it was given in this case; but often it is exhibited from a closed inhaler, regardless of the fact that it contains chloroform and should therefore always be given well diluted with air.

INFLUENCE OF FASTING ON MUSCULAR FORCE.

AN Italian physician, Signor Manea, has recently investigated the influence of fasting for periods of twenty-four and of thirty-six hours on his muscular power, testing this both by voluntary efforts of, and by the application of an electrical current to, the muscles of his forearm. The conclusion at which he has arrived is that fasting within the above limits has no influence on the muscular power. The deviations after longer periods observed by other investigators he thinks are attributable to the effects of the fasting on the nervous system, circulation, and respiration. Signor Manea distinguishes two stages in fasting: one in which a kind of compensation of the injurious effects of fasting is effected through the agency of the nervous system, and a second in which there is deranged compensation, with disturbances of the several organs strongly marked, accompanied by loss of weight and abundant excretion of nitrogen in the urine, after which death occurs. The great powers of resistance possessed by the muscles in regard to their force are, he thinks, due to the glycogen and sugar in the blood, which do not materially alter in quantity even after prolonged abstinence.

THE MEDICAL PROFESSION AND THE STORES SYSTEM.

WE are glad to see indications that our criticisms on this subject in THE LANCET of Aug. 25th last have had some effect. In the price list of June last of one of the Coöperative Societies there were two gentlemen named with whom certain arrangements had been made by the society. We are glad to say that in the December list the number has fallen to one. We must be thankful for a fall of 50 per cent. We shall still treat this matter impersonally in the hope that the solitary member of the profession on this list will soon feel his isolation and the force of our objections. Theoretically it is intelligible how such arrangements should have been hastily consented to; but, on reflection, they will be seen to be objectionable and a clear means of facilitating the taking of the patients of other medical men. The advertisement of names is forbidden by the Stock Exchange, and surely we should not be behind that body in the sense of what is fit. There still remain, we regret to say, the names of four dentists, one of them with a qualification from a medical authority. We appeal to them all to support the principles we advocate—the avoidance of advertising and the refusal to have anything to do with temptations to patients to leave their own medical men, who best know their circumstances and how to adapt charges.

LETHAL AND NON-LETHAL EFFECTS OF STRONG ELECTRICAL CURRENTS.

M. BERNHARDT, in the *Centralblatt für die Medicinischen Wissenschaften*, has collected several instances of death by electricity. In one recorded by Dr. J. Kratter a man aged twenty-six was traversed by a current of high tension—1600 to 2000 volts—and was found breathing stertorously a few steps from the point where he made contact. Death soon took place. The post-mortem examination, after the lapse of twenty-one hours from the time of death, disclosed two small wounds—one on the left index finger and the other on the back—and there were large extravasations of blood in their vicinity. All the organs of the body showed hypervenous blood, acute œdema of the lungs was present, and there were extravasations into the sheath common to the carotid and vagus, along all the vertebræ, into the intercostal spaces, around the œsophagus, beneath the peritoneum and elsewhere. The muscles of the body were in an extreme condition of rigor mortis; the heart was partially relaxed. No macroscopic changes could be seen in any part of the nervous system. Kratter thinks that the electrical shock suddenly paralysed the heart, which was the immediate cause of death, accompanied by œdema of the lungs causing hypervenosity of the blood. There was a marked contusion on the left side of the diaphragm at the point of contact of the heart. Experiments made on animals, showed that in them the respiration was usually primarily arrested, which caused asphyxia and secondary stoppage of the heart's action, though sometimes the heart was first affected. In a second case, reported by M. D'Arsonval, a man was struck with a current of 4500 volts (the ampère meter indicated 750 milliampères). The current entered at his hand and issued at his back. Half an hour or more elapsed before any attempts at resuscitation were made, but on artificial respiration being practised on Silvester's method recovery took place. Lastly, Dr. Donnellan reports a case of the passage of a current of 1000 volts through a man, which instantly caused coma, dilated pupils, pallor of the face and sweating; delirium, and tonic alternating with clonic spasms followed. The pulse was 80. The respiration, at first stertorous, passed into the Cheyne-Stokes type. After the injection, first of morphia, and then of strychnia the patient fell into a deep sleep, from which he awoke convalescent.

THE HISTORY OF THE ROYAL MICROSCOPICAL SOCIETY.

ON Jan. 16th was held the annual meeting of the Royal Microscopical Society, at which Mr. A. D. Michael, the President, delivered an interesting address on the history of this body. In 1839 a party of seventeen gentlemen assembled at the house of Professor Quekett, 50, Wellclose-square, "to take into consideration the propriety of forming a society for the promotion of microscopical investigation, and for the introduction and improvement of the microscope as a scientific instrument." The outcome of this was a public meeting at the rooms of the Horticultural Society, Richard Owen (afterwards Sir Richard) in the chair, when the Microscopical Society of London was formally started. John Quekett was appointed secretary, an office which he held almost to his death. At his decease certain members of the society subscribed to purchase for the society's collection a curious microscope which Quekett possessed and which had been made by the celebrated Benjamin Martin about 1770, probably for George III., and they extended their subscription so as to provide a medal to be called "the Quekett medal," to be given from time to time to eminent microscopists, and how, difficulties having arisen, it happened that the only Quekett medal ever awarded was given to Sir John Lubbock. The use of the microscope in medicine has become such a routine practice that there is some danger of the younger generations of practitioners forgetting how much they owe to the labours of this society in improving by its influence and assistance an instrument which is now in every student's hands. It is a trite saying that inventions arise according to the need for them, but how much toil and weariness would the older worker have been spared had he possessed the microscope of modern days. With the aid of a frog and a microscope Harvey could have made his immortal discovery in five minutes, and yet perhaps his loss is our gain, for in that case the world would never

have enjoyed his masterly piece of deductive reasoning. Mr. Michael, in considering the future of the microscope, said that he believed there was as much scope for progress in the future as there had been in the past. Perhaps the fantastic ideas of Fitzjames O'Brien will be one day realised, and "from a diamond of 140 carats, submitted to an electro-magnetic bombardment," will be fashioned the perfect lens. Though the modern man of science will probably not see an "Animula" (if he did he would cultivate her in agar-agar), we have little doubt that the improvement of the microscope will still proceed under the ægis of the society, and that with increased powers of definition much that is now necessarily obscure will be revealed.

THE DUKE OF ARGYLL.

THE Duke of Argyll is making very favourable progress. He is regaining his strength steadily, if slowly, the pulse being regular and increasing in force. The fever has now practically left him, as the temperature is usually normal, while an average appetite points to some abatement of the dyspepsia. He has been able to sleep from five to six consecutive hours; and altogether, at the time of going to press, his condition appears to us more favourable than certain disquieting rumours would have led us to expect.

THE SALARY OF THE MEDICAL OFFICER TO THE WIGAN UNION.

THE question of the salary of union medical officers has always been a sore point between members of the profession and the general public, on the one hand, and boards of guardians, on the other. The latter bodies—actuated, no doubt, by a laudable regard for the ratepayer's pocket—have a tendency to behave in a somewhat parsimonious manner towards a hard-working and deserving body of men. At a recent meeting of the Wigan board of guardians a guardian, Mr. J. H. Prescott, drew attention to the fact that the medical officer by means of extras was getting something like £650 a year, and though he had to pay a man £50 out of that it left him with £600 per annum, which he (Mr. Prescott) thought was too much. Extras ought to be abolished and a fixed salary paid, and he considered that the Wigan board ought to apply to the Local Government Board to see if this could not be done. Now let us see what the medical officer does for his £650 per annum, a remuneration which Mr. Prescott finds so disproportionate when compared with the duties. He is absolutely debarred from private practice and devotes his whole time to his public work. The population is 53,000, and Wigan has more out-door paupers than any union in Lancashire. There are 600 permanent order cards, and paupers holding these cards need not trouble the relieving officer for an order, but send in their cards when an order is required. The salary is £130 per annum, with a house, surgery, coals, and gas; £40 are allowed for a dispenser. The extras are midwifery and surgical cases, lunacy and vaccination fees. All these extras come by special order of the relieving officer and are examined by the auditors. The guardians' advertisement stated: "Salary £130. Vaccination fees to Lady Day last £56." These have now, owing to the neglect of the vaccination laws, fallen to £24, but the guardians, we presume, will not make this up to the advertised amount. The extra pay means extra work, and if the relieving officer has given orders with too lavish a hand it is the guardians' duty to inquire into the matter and not stint their medical officer. The principle of a fair day's wage for a fair day's work is an excellent one, and we can imagine no better case for applying it than to that of a union medical officer. Not for him the eight hours day, the Saturday half-holiday, or the weekly rest. At all times he is supposed to be ready to answer any call, to give his time, his knowledge, and his help to the relief of the poor and suffering, and his reward should be commensurate with his work.

THE DIFFUSION OF SMALL-POX.

IN London there was a death registered last week from small-pox, after the absence of this disease in a fatal form for a fortnight, the death being that of an adult concerning whose vaccination no statement is given. The deceased belonged to Marylebone, in which parish small-pox has lately shown some signs of renewed activity. The fresh cases last week in the metropolis were 10 in number, and the admissions to the institutions of the Asylums Board 6, against 1, 8, and 8 in the preceding three weeks, leaving 32 patients under treatment, an increase from 28 on the previous Saturday. During 1894 the number of notifications of small-pox in the whole of London was 1391, a number equal to 3·3 per 10,000 living in 1891. Among the sanitary areas contributing largely to this total were Marylebone with 417 notifications, Poplar with 124, St. Pancras with 106, Islington with 105, and Bethnal Green with 93, these five districts with less than 25 per cent. of the population contributing upwards of 60 per cent. of the notifications. The registered deaths in the year were 93, as against a corrected decennial average of 312. The per case mortality last year was 6·7 per cent. In the provinces last week the midland towns of the Manor of Aston, Wolverhampton, West Bromwich, and Birmingham had experience of the disease, the three first named lightly and the last named in the form of 2 fatal cases and some dozen or more of fresh attacks. No deaths occurred in Liverpool, but half a dozen cases were heard of there, and also in the adjoining borough of Bootle. In the second week of January matters in Dublin grew worse, the admissions to hospital being 88, as compared with 71 the previous week. The deaths were 11 in number, comprising 5 in vaccinated persons, none of whom were under ten years of age, while of the 6 in unvaccinated individuals 5 were under ten years of age. There were left in hospital 345 patients, including 151 convalescents at Kilmainham.

LORD RANDOLPH CHURCHILL.

IT is not within the scope of THE LANCET to review the political life of Lord Randolph Churchill, or to even attempt to decide concerning his place in and influence upon the history of an empire; we can only in general terms confine ourselves to an expression of deep regret that a man with so brilliant a retrospect, and until two years ago so brilliant a prospect, should have been cut off in mid-career under circumstances of such particular sadness. No one knowing the conditions expressed by the term "general paralysis" could have expected any other than the sad issue to his illness which took place early on Thursday morning last from rapidly increasing congestion of the lungs. All medical readers of the numerous bulletins reporting almost from hour to hour in the daily press the progress of his malady must have seen that the end was coming; and, latterly, despite the lingering course the terrible malady in question is wont to pursue, must have seen that that end was coming quickly. Lord Randolph Churchill's case has throughout been typical of general paralysis. In its history, which we published on Dec. 29th, 1894, it forms a fairly representative picture of the usual symptoms when the disease has well established its hold, while in the story of his life we have many of the elements likely to develop in him latent tendencies towards the malady. High spirited and nervous by constitution, he led an over-full life in every direction. For a considerable time he stood in the van of the Conservative party, and, being distinguished alike by his relentless tactics towards opponents and his irresponsible attitude towards friends, he drained

to the very dregs the heady cup of politics. Official responsibilities were thrust upon him at an early age and at an early stage in his political career, while he continued to double with the life of the statesman—not that of the ordinary statesman, but of the stormy statesman—the life of the great nobleman and the man of pleasure, sport, and fashion. Early success prompted him to over-effort, a great and unexpected check caused him to redouble those efforts, and the result of it all was ruin to his nervous constitution. No political leader of recent times, not even Lord Beaconsfield, has had a more personally affectionate following than Lord Randolph Churchill, and we believe that it will be a solace to his admirers to learn that during the end of his career the hand of sickness was upon him, so that in considering his claims upon their admiration, they must in justice to the sound man neglect the failings of the sick man.

THE spring term of the London Post-graduate Course will commence on Feb. 4th, and will last eight weeks. In addition to courses on General Medicine and Surgery, there will be courses on Diseases of Children, Diseases of the Nervous System, Diseases of the Eye, and Diseases of the Skin, Throat, and Ear, and Bacteriology. The fees are £1 1s. and £2 2s., according to the number of lectures in a course; and we are requested to state that a prospectus can be obtained from the Secretary, Dr. Fletcher Little, 32, Harley-street, W., who particularly desires to hear promptly from gentlemen intending to join the classes.

THE committee which has been appointed by the Clinical Society of London "to investigate the clinical value of the anti-toxin treatment of diphtheria" is now definitely fixed upon. It consists of Dr. Church, Dr. Stephen Mackenzie, Dr. Coupland, Dr. Hale White, Dr. Pasteur, Dr. Sidney Martin, Dr. Washbourn, Dr. H. P. Hawkins, and Dr. E. W. Goodall; and we can well believe that the profession will await with interest the joint report of individuals so well fitted to express a practical as well as a scientific opinion. Sir Joseph Lister was invited to join the committee, but was unable to accede to the request of the society.

OWING to pressure on our space we have been compelled to postpone the continuation of our report of the Indian Medical Congress until next week.

DIFFICULTIES UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT.

II.[1]

2. Nature of the Visit by the Medical Officer of Health.

THE medical officer of health having decided that a personal visit by himself is desirable in a given case of infectious disease of which he has become aware, whether under the Act as to notification or otherwise, the question arises as to what should be the nature of that visit. This question has given rise to much difficulty and at times to misunderstanding and even ill-feeling.

In the first place it should be remembered that a medical officer of health has absolutely no *right*, in virtue of his office or under the Orders relating to his duties, to enter on any private premises. It is true that under Section 102 of the Public Health Act, 1875, it is enacted that the officers of the sanitary authority "shall be admitted into any premises for the purposes of examining as to the existence of any nuisance therein," but the section contemplates the refusal to admit these officers even for the limited purposes specified, and it is only when a magistrate has, after certain formalities, granted an order of admission that the actual right of entry is acquired in such form that it can be enforced. For this reason it is always desirable that permission to inspect premises should be asked, and, so far as we know, this permission is rarely or never refused when the inspection in question is limited to what is commonly included under the term "premises." When it becomes a question of entering private apartments, and especially sick chambers, then the matter stands on a somewhat different footing. To this point we shall refer later, but for the moment it may be accepted that the ordinary courtesies of life are nearly always quite sufficient to secure inspection of premises on which infectious disease has occurred with a view to "inquire into the causes and circumstances of such outbreak," and of advising "the persons competent to act" as to what may be required "to prevent the extension of the disease," as also of enabling the medical officer of health to "take such measures for the prevention of the disease as he is legally authorised to take."[2] The contention that it is necessary to extend such visit to the sick chamber has generally been raised in connexion with a visit by the medical officer of health to the sick person concerned; but there have been cases where the two questions have been dissociated, and we, therefore, deal with them apart. On the question as to a visit to and examination of the sick-chamber itself it has been held by the Local Government Board that, whilst the particular circumstances of the special case must decide whether it is necessary to the performance of the duties quoted above from the Order of March 23rd, 1891, that the medical officer of health should have access to a particular room—namely, the sick-chamber,—"in the majority of instances in which cases of infectious disease are notified there is no need for a medical officer of health to personally inspect the apartment for the treatment of the sick person, and that in the remaining instances where such visit may become necessary it should be remembered that, apart from cases to which Section 102 of the Public Health Act, 1875, may be applicable, this can only be done with the consent of those having charge of the patient and that the coöperation of the medical practitioner in charge of the case should be secured if possible." In other words, unless it is believed that there is "nuisance" in the sick chamber and that the cause of the disease is in some way concerned with that chamber, the medical officer of health has no duty under the Order of the Local Government Board and no right under the statute to inspect that chamber.

There are, of course, cases where such inspection may be desirable or even necessary—as, for example, where the chamber of a person suffering from enteric fever is believed to be in direct communication, by means of a sink or overflow pipe, with some drain. Wherever there are such suspicions inspection may properly be requested, such request being best proffered in consultation with the medical attendant, and, if need be, enforced by application to a magistrate under Section 102. This latter action will, however, be but rarely necessary where the ordinary preliminaries are properly observed; in fact, we hardly know of such an instance having occurred.

It will be observed that in regard to visits to the sick-chamber the Local Government Board urge upon the medical officer of health to secure, if possible, the coöperation of the medical practitioner in attendance on the case. This principle may be extended even to the inspection of premises in certain cases, for there will certainly occur in every district cases of infectious disease on premises which should not, according to the current rules of professional etiquette, be visited by another medical man, though a health officer, except after communication with his colleagues. And in this connexion we cannot but recall the fact that in numbers

[1] Part I. was published in THE LANCET of Jan. 19th, 1895.

[2] See Order, March 23rd, 1891.

of letters which have emanated from the Local Government Board medical officers of health have been urged not to forget "the customs that usually govern the relations of medical practitioners to each other." This, indeed, is the one means by which, above all others, difficulties arising under the Act as to notification can best be avoided.

It has, however, been asked whether a medical officer of health ought not always to assume that, in the sick chamber of a person notified to be suffering from infectious disease, there is something of the nature of a "nuisance" which demands his entry and inspection. Such a view is an extremely strained one. We doubt if any magistrate would, on evidence limited to the existence of a case of infectious illness only, ever grant an order of entry under the Public Health Act; and it is evident that the Local Government Board take the same view. Thus, in a letter written by them, it is stated "that the Board do not regard the existence of every case of notified infectious disease as necessarily involving reasonable cause to suspect the existence of a nuisance on premises such as is contemplated in Section 102 of the Public Health Act, 1875."

But the point that has caused most discussion and trouble has been the practice of some medical officers of health to visit and examine the sick person. Some seem to have done this as a matter of course in the performance of their regular duties and quite apart from any special reason in the individual cases; others, again, have done it by way of satisfying themselves or the authority whom they serve as to the correctness or otherwise of the certificate of notification. Those who have adopted this course as a matter of habitual practice have in certain instances contended that it was their duty so to do. Such was certainly never the intention of the Act relating to notification, and this is the more obvious because no increase of salary to the health officer was made one of the conditions of the adoption of that Act; although it is evident that if the medical officer of health was expected to visit every person notified to be suffering from infectious disease his duties would become very largely increased. And, in answer to appeals made to the Local Government Board on that point that department has again and again announced that "they do not consider that either the Infectious Disease (Notification) Act or any Order of the Board imposed upon a medical officer of health any obligation to visit each case notified to him under the Act"; and they have further reminded authorities that any such examination can only be made "with the consent of the patient or of those having charge of the patient," and that such a practice is not only no duty of the health officer, but that it is, as a rule, "undesirable."

There may, however, be exceptions which may call for departure from the general rule that it is undesirable that the medical officer of health should in virtue of his office make a personal examination of a patient, and two of these exceptions have been recognised by the central authority. Both of them apply to special cases only. The first exception has to do with certificates that are assumed to be fraudulent. In such cases the medical officer of health doubtless has a duty towards his authority, and however much he may regret to perform an unpleasant task it cannot be held that he acts improperly if he protects his authority against that which is believed to involve a breach of good faith on the part of the certifier. The views of the Local Government Board as to this are set out in several letters, one of which we quote in full because it also explains what are the special precautions which should be adopted in visiting a patient with a view to revise the diagnosis that has been made in the notification certificate. The letter, which was addressed on Oct. 1st, 1890, to the town clerk of Bolton, is as follows: "It appears to the Board to be undesirable that the medical officer of health should in general undertake a personal diagnosis of the notified cases in order to test the accuracy of the certificates. In some cases, as where there is reason to doubt the good faith of the certifier, or where the disease is one which, in itself or owing to the attendant circumstances, threatens exceptional danger to the community, it may be desirable that the medical officer of health should make a personal diagnosis; but it must be remembered that this can only be done with the consent of the patient, or those having charge of the patient, and that the medical practitioner in charge of the case should always be communicated with and his coöperation secured if possible." But want of good faith is not to be assumed merely because the medical officer of health doubts the accuracy of the diagnosis. Quite the contrary, for as the clerk to the Foleshill rural authority was informed by the Local Government Board on March 12th, 1892, "the certifier's statement of the nature of the disease should be accepted unless there is strong reason to believe that he is not acting in good faith."

We have heard of instances in which the medical officer of health has allowed himself to be habitually used by his sanitary authority as a reviser of notification certificates. Such action is naturally resented by his fellow practitioners, and it distinctly lowers the status of the health officer. If it can be more objectionable in one class of official than in another, it is so in the case of medical officers of health who are themselves in general practice, and who thus lay themselves open to the accusation that they are "competitors" for practice. Happily such action is rare, and we trust it will cease altogether.

The Foleshill letter refers to another class of cases—namely, notifications announcing or indicating the existence of diseases which "threaten exceptional danger to the community." Thus a first notification of cholera or of typhus fever in a district where no such disease has for some time past been known to exist may not only justify but may necessitate a personal inspection of the sick person for the purposes of confirming the diagnosis with a view to the adoption of exceptional measures of prevention. In such a case the object of the visit would solely be to enable the medical officer of health to advise his authority as to the needed administrative action, and not for the mere purpose of testing the accuracy of the diagnosis. Under such circumstances the visit should be paid jointly by the medical officer of health and the medical practitioner in attendance, and the ordinary rules followed in consultations should as far as possible be observed. Similar necessity may arise when a group of notifications under an indefinite heading, such as "continued fever," either gives rise to a suspicion of typhus fever or fails to indicate to the medical officer of health what are the measures of prevention which it is his duty to advise or carry out. If by any chance, in these and similar cases, the medical practitioner should, notwithstanding that the ordinary courtesies of professional life have been observed, decline assent to the health officer's visit, then it may well happen that the latter may properly hold that his duty towards the public requires him to secure, if possible, a personal inspection of the sick person. But even then he cannot demand it; the visit can only be paid with the consent of the sick person or of those in charge of that person; and it will be more than ever desirable that the visit should be paid under such conditions as to avoid all possible complaint on the part of the several persons concerned. As a matter of fact, continuous observance of official courtesies in all branches of the duties of the medical officer of health should in themselves suffice to prevent difficulties from arising in such a case as we have described.

Summarising the points thus far adverted to, it may be laid down: 1. That the question of a personal visit by the medical officer of health is a matter to be decided by the medical officer of health, he being the judge as to what

constitutes an "outbreak" for the purposes of the Order relating to his duties. 2. No duty attaches to a medical officer of health to "visit ..... the spot" in every case of notified disease. 3. When he deems it his duty to pay such a visit he should remember that, apart from a magistrate's order, he cannot claim a right of entry to any premises, and that both as regards the occupier and the medical practitioner in attendance their voluntary coöperation should be sought. 4. That the existence of a case of infectious disease in a given apartment cannot be deemed to mean the probable existence of a nuisance in that apartment; and that a medical officer of health should not therefore claim a right of entry on such grounds. 5 That the medical officer of health has no right to inspect patients, that such inspection is as a rule very undesirable, and that it should not be contemplated, even when it is necessary, except after communication with, and if possible in co-operation with, the medical practitioner in attendance on the case.

(To be continued.)

A TEACHING UNIVERSITY FOR LONDON.

ON Tuesday last the Prime Minister received three deputations, who laid before him their views on the Gresham University scheme. One, the first, was composed of the representatives of the bodies within and without the existing University of London not in favour of the adoption of the scheme, and it will be seen that King's College has come into line with the other important educational bodies of London. The other two deputations represented the graduates of London University "desirous of maintaining the Imperial characters of the University," and the Gresham Scheme Amendment Committee. These two deputations were received together as jointly opposing the Gresham scheme, though upon several grounds.

The Deputation in favour of the Scheme.

The deputation included the Right Hon. T. H. Huxley, Professor Rücker, and Sir Henry Roscoe (representing the Professorial Association); Sir John Russell Reynolds, Bart., and Dr. Allchin (representing the Royal College of Physicians of London); Mr. J. Whitaker Hulke (representing the Royal College of Surgeons of England); Sir John Eric Erichsen, Bart., and Sir George Young, Bart. (representing University College); Rev. Prebendary Wace and Sir William Priestley (representing King's College); Sir Julian Goldsmid, Sir William S. Savory, Bart., and Mr. Anstie, Q.C. (representing the Senate of the University of London); Professor Sylvanus Thompson (representing the Committee of Graduates); and Dr. Frederick Taylor (Guy's Hospital), Dr. Sidney Coupland (Middlesex Hospital), Mr. Hutchinson, jun. (London Hospital), Dr. Payne (St. Thomas's Hospital), Mr. Herbert Page (St. Mary's Hospital), Mr. Spencer (Westminster Hospital), Dr. Isambard Owen (St. George's Hospital), Dr. Shore (St. Bartholomew's Hospital), and Mr. Stanley Boyd (Charing-cross Hospital). Representatives of other educational and scientific institutions of the metropolis were also present.

Professor HUXLEY, in introducing the deputation, said that in a matter of this kind the general feeling on educational matters in London would naturally be led by the University of London. The deputation represented the University, its Senate, Convocation, and graduates; in addition, all the principal London colleges, the great medical corporations, the medical schools, and several important provincial institutions were also represented. Finally, an association including practically all those engaged in science (of which he had the honour to be president) was also represented there in his person. He then referred sympathetically to the domestic reasons which had prevented the Vice-Chancellor of the University, Sir James Paget, from introducing the deputation. The ideal of a university, Professor Huxley considered, could not be subject to more divergent views than must the best practical manner of giving reality to any ideal under the circumstances which obtained among the educational institutions of the metropolis, which had grown up, as it were, spontaneously and without plan. This was not the first time that some attempt had been made to introduce order into what, without disrespect, he thought he might almost term chaos. Sixty years ago the attempt was made, and although what the projectors of that scheme desired was not eventually granted to them they obtained a something, which had undoubtedly proved to have had an immense influence upon the progress of general and professional education and to have done a vast amount of good work. But it was not what the original proposers wanted, which was to have a teaching and learning corporation; that which was eventually established was a purely examining body—the present University of London. The question of the position of educational affairs in London had been under much discussion. Since 1888 two Royal Commissions had occupied themselves with it. They had devoted an immense amount of labour, time, and acumen to the consideration of enormous masses of evidence, and he thought that it would be probably impossible to devise any opinion upon that topic which had not been before the Commissions. The report of the second Commission was admitted to be thoroughly comprehensive, well matured, and weighty, and their principal business there that day was to say that, in principle, they accepted the recommendations of that Commission, and asked that they might be carried into effect with as little delay as possible. At a full meeting of the University of London, held in July last, it was resolved to be desirable to memorialise Government to take immediate steps for the appointment of a Statutory Commission to frame statutes in accordance with the representation of the Gresham Commission, with power to make such modifications as may seem to them expedient after considering any representations made to them by the Senate, Convocation, or any other bodies affected; and that resolution was not only carried in a very full meeting with only two dissentients, but similar resolutions had been passed by the body of delegates referred to in the report of the Commission and by the association of which he had the honour to be president. Whatever modification a particular body might desire, all were of one mind in desiring two things: (1) the formation of a University of London as an organic whole by the voluntary coöperation of the various institutions for learning, teaching, and examining, and (2) the appointment of a statutory authority as the indispensable instrument for effecting the organisation.

Sir JULIAN GOLDSMID briefly supported Professor Huxley and said that under the Gresham scheme the existing standards would not be lowered.

Dr. ALLCHIN said that the Royal College of Physicians in London cordially concurred in the recommendations of the Gresham Commission, and earnestly hoped that a Statutory Commission would be appointed forthwith to give effect to them. At the same time the College fully sympathised with the desire expressed by the various institutions referred to in the scheme, and who had signified approval of it, that the Statutory Commission should be empowered to make such modifications in detail as might appear desirable after hearing the representations of the bodies concerned. The College was impressed with London's need for a teaching university, in which the teachers should have a direct and considerable share in the management, so that the higher instruction might be coördinated and brought into line with the examinations. The Royal Colleges of Physicians of London, and of Surgeons of England, were not primarily educational bodies, and the success of the new University on the lines proposed would bring them disadvantage in pecuniary position and in influence within the medical profession, for at present they examined and qualified the great bulk of the practitioners of England and Wales, while if the new University were constituted a far larger number of medical students would take University degrees, and consequently fewer would take the diplomas of the Conjoint Board. Nevertheless, so impressed were they with the necessity for the new University that they urged his lordship to consider it pressing. In one other respect the College occupied a peculiar position. In view of their long experience and perfection of arrangements for conducting highly technical examinations they claimed to be associated for examination purposes with the new University. The claim had been recognised by the Senate of the London University and by the late Royal Commission. He was instructed further to submit that if the Government consented to the appointment of a Statutory Commission someone thoroughly conversant with the relations of the Colleges to each other, to the medical schools, and to medical education generally should be appointed to the Statutory

Commission. The Colleges and all the medical examining and teaching bodies in London showed with regard to these a remarkable unanimity.

Mr. HULKE agreed with the foregoing speakers, and briefly stated the grounds upon which the Council of the Royal College of Surgeons of England, endorsed by meetings of the Fellows and Members, had concurred in the scheme.

The Reverend Dr. WACE, while also supporting on behalf of King's College the appointment of a Statutory Commission, drew attention to the fact that in more than one detail the position of that College was compromised.

Dr. FREDERICK TAYLOR said:—"I am here on behalf of ten medical schools in London, and have to express the general concurrence of those schools in the views expressed by previous speakers. They generally approve the proposals contained in the report of the Royal Commission on the Gresham University, and desire the appointment of a Statutory Commission to carry it into effect, but with full powers to make such modifications in details as may seem to them desirable after hearing the wishes of the various institutions concerned. On that Commission it is desirable from the important position the faculty of medicine holds in the present University that one of the members should belong to the medical profession. I should like to point out to your lordship that the institutions which we represent, commonly known as medical schools, are practically colleges in the faculty of medicine, that they have been affiliated as teaching institutions to the present University of London, and that in fact they very largely serve the purpose of colleges in medicine to the older universities in England, since by far the greater number of the medical students of these older universities pursue their studies for one, two, or three years at the London medical schools before they take their medical degrees. Further, I would point out that, in respect of their systematic teaching, their equipment, the inevitable influence from constant association of the teachers over the students, the length of that association for a period of five or six years, the fact of residence at least in the case of a small proportion of students, these institutions are as valuable for the purposes of education, in its wider sense, as any other colleges forming part of a university. What is wanting to us is this, that with all these qualifications it is nevertheless only a small proportion of our students who attain to a university degree. Unfortunately, the majority, for various reasons, only study for the diplomas which qualify them to practise their profession, which, valuable as tests of medical knowledge, have not the prestige of a university degree. The establishment of a university according to the scheme of the Royal Commission, in which the medical schools were incorporated as constituent colleges, would not only be an inducement for every student to aspire to a university degree, but would also bring the university degree within reach of a much larger number than now attain to it. The student entering upon a profession like that of medicine would then, as he should, look to a university degree as the end of his studies. Further, the association of the schools together in one university would tend in the medical schools as a whole to raise the teaching to a higher standard even than it has at present."

Lord ROSEBERY, in reply to the deputation, said:—"Professor Huxley and Gentlemen,—I am not in a position to-day to make you a definite announcement of the position of the Government, but I may say this much—that the Government attaches great importance to the report of the Commission presented last year, and is fully sensible that the present time offers a favourable opportunity for the appointment of a Statutory Commission in the sense in which you wish for it. We have here to-day the representatives of various educational associations announcing to us their earnest wish that a question which has caused much controversy and some ill blood should be put an end to speedily, and that in the interests of the metropolis we should not any longer be subject to the reproach that London is without a teaching university. I have agreed to receive the objectors to the Gresham scheme this afternoon, and it would be disrespectful to them to reply definitely to you. It would be to declare myself to have a preconceived opinion. The Convocation of the University of London also meet this afternoon, and no doubt their decision on the matter will be made the subject of Government representation. But I will later, and without loss of time, inform you of the position of Government in regard to the matter. But the proposed Statutory Commission has one condition which has been unanimously laid down, though insisted upon more in some directions than others—that while it should be guided in its principles by the report of the Commission, it should be to a large extent unfettered in respect to details. Government will, I think, take full heed of that view. But if the Government is able to announce that it will proceed with the legislation required for the appointment of a Statutory Commission it must make a demand in its turn. It will be absolutely necessary, in view of the work of the session, that legislation on this point should not meet with any long or obstinate Parliamentary resistance. I do not know what emollient faculties this deputation may possess with respect to the Parliamentary powers which may be exercised in respect of any proposals we may make; but I would earnestly beseech them to exercise such powers as they may possess if we are finally to be able to announce that we are able to comply with their prayer."

Professor HUXLEY thanked the Prime Minister for receiving the deputation and for his reply. The deputation then withdrew.

The Deputations against the Scheme.

In the afternoon of the same day Lord Rosebery received two deputations introduced by Mr. Fletcher Moulton, Q.C., M.P., which included Dr. W. J. Collins (representing the Gresham Scheme Amendment Committee), Mr. Bompas, Q.C. (representing 900 graduates of London University), Mr. T. B. Napier, LL.D., Dr. Sansom, Mr. Heber Hart, LL.D., and others.

Mr. FLETCHER MOULTON, in introducing the deputations, said that he had been chosen to say a few words because he had not taken an active part in the special efforts which had been made in this matter although he had a close connexion with London University. The scheme for the Gresham University, with respect to which they had met, was broadly described as a proposed union between a teaching university to be formed in London and the old London University. There was no doubt that the scheme had been mainly supported by the school of educationists who considered the chief value of education consisted in the actual teaching derived from teachers, believing that tests by examination merely testified to successful cramming. He felt strongly that those who urged that a teaching university was a good thing forgot that it was unattainable by the bulk of those who had graduated at the London University in years past, the same class as would, he hoped, go through its examinations in the future. In a teaching university it was necessary that the teachers should be the examiners either personally or constituting the board which directed the examinations. Therefore there must be separate examinations for those who resided and those who did not reside; and in the latter case it would be better to leave the work in the hands of those who had already done so well. For if there were only one examination there would be unfairness observed to the two classes of students, or what was of more importance, the reputation for unfairness, for it was impossible to hold for resident students an examination which turned on what they had been specially taught, and with fairness hold the same examination for non-residents. He maintained that the adoption of the Gresham scheme would cripple the University, and that without addition to its teaching efficiency its cosmopolitan character and reputation would be destroyed.

Mr. BOMPAS said that he represented 900 graduates of London University who had expressed their views by mouth and postcard, saying that if a teaching university were required it should be separate from the existing institutions. Most of those whom he represented were in favour of a teaching university in London, but not of the Gresham scheme, which would detract from the position already enjoyed by the holders of the London University degree. There was no pass degree in the world which could compare with that of London. The new institution would be governed by a senate appointed on different principles, and would have for its object local teaching instead of Imperial examination. It would grant degrees for other considerations than examination. In time the examinations would have characters which would make them more suited to the student at London University than to others. It would also cause great delay; for the opponents of the scheme, many of whom were Members of Parliament, would strive to the last against it. London University had no right to object to the establishment of a teaching university in London, but within the last twenty years the Queen had declared that the degrees of London University should not be interfered with without the consent of those who had taken them, and now it was urged that the Queen ought to take advantage of an

Act of Parliament to break that promise. That would not be a right or an honourable course.

Lord ROSEBERY: How many graduates of the University are there?

Mr. BOMPAS: Three thousand, seven hundred. He appeared on behalf of the Imperial character of the University against a scheme which was desired by London only.

Dr. W. J. COLLINS said that he represented the Gresham Scheme Amendment Committee and objected to the scheme from no narrow vested-interest point of view, but because it would tend to make the influence of the University more local in character. He said, in answer to the Prime Minister, that he could not tell how many graduates were members of the society, but that his views had procured him election to the senate of the University.

Mr. HEBER HART, LL.D., considered that a teaching university in London would be essentially local, just as an examining university was Imperial, and he considered that their functions could be kept as distinct as those of the London County Council from those of Imperial Parliament. Of the 3700 members of Convocation at least 1000 did not trouble to give notice of their addresses and so could not be communicated with and might be considered non-effective members altogether, but he knew that the new institution might be popular in London, but it would be intensely unpopular in the country at large.

Dr. SANSOM and Mr. NAPIER, LL.D., also spoke.

The Earl of ROSEBERY, in his reply, expressed his obligations to the members of the deputations for their consent to merge the two deputations into one for his convenience. He said: "I quite understand that there are two schools of thought before me. First, that school represented by Dr. Collins, whose objections did not seem to be insurmountable. Dr. Collins felt that the standard of examination might be lowered in the University of London by any association with teaching. But it appears to me that he feels that that objection could be met, if in any way he could obtain some guarantee that the standard would not be lowered. There is nothing in the report of the Commissioners which would prevent the Statutory Commission, if it should ever exist, from founding an examination of a separate kind for those students who are not under the teaching of the University. I can conceive the possibility, which seems inconceivable to the members of this deputation as a whole, that there might be some such separate extension framed for external applicants for degrees to the University of London, which should fully maintain, even if the new University did not itself maintain, the standard of examination on which these deputations set such value. This seems to me the common ground on which the two deputations meet. But the second school of thought, represented by Mr. Bompas, goes a good deal further than this. Mr. Bompas has touched on the essential incompatibility between a teaching and an examining university. I find a difficulty in accepting the doctrine that there is such an incompatibility. Mr. Bompas has shown himself much more antagonistic than Dr. Collins, and attentive consideration will be given to his views. You speak of this as a mere London or local matter, but your contention is based largely on Imperial interests. Well, London is the metropolis of the Empire, and nothing in regard to London can be considered local. If we, by obtaining some standard of examination which shall not lower the standard as hitherto known, and which shall at the same time provide a teaching university for London, we shall, I believe, have done the best for London and the Empire; and I am bound to say, what I did not say to the deputation this morning, that our convictions rather point in the direction of the appointment of a Statutory Commission for framing such a scheme which should at the same time be able to receive full representation from you or from any other interests involved enabling them to arrive at a scheme not unsatisfactory both to the London University as it at present exists and to the empire at large. I have spoken to you quite frankly and have no time to say more. What you have said has interested me very much, and I am only sorry if in what I am saying I am not stating what is wholly satisfactory to you."

The deputations then withdrew.

Extraordinary Meeting of the Convocation of London University.

AN extraordinary meeting of Convocation of the University of London, adjourned from May 8th, 1894, was held at Burlington-gardens on the 22nd inst. The proceedings occupied not much less than four hours, and the discussions were occasionally somewhat heated. Mr. E. H. Busk, Chairman of Convocation, presided.

Before proceeding to business Professor Sylvanus Thompson expressed the condolence of the University with the Vice-Chancellor, Sir James Paget, in his recent bereavement.

The report of the annual committee having been adopted, Professor THOMPSON moved a resolution to the effect: "That Convocation is of opinion that there should be one university in London and not two; and that the interests of higher education will be best served by such an enlargement and reconstruction of the existing University as will (while retaining its existing powers and privileges, and without interfering with the efficient discharge of its present duties as an examining body for students from all parts of the British Empire) enable it to promote learning, scholarship, and research as a Teaching University for London." In support of his motion Professor Thompson said that the matter resolved itself into the question whether there should be in London two universities or one. Most of the authorities concerned, including King's College, had now acceded to the recommendations of the Gresham Committee. The true function of a university was to provide means and opportunities of education, and not to restrict itself to the mere testing of the knowledge possessed by candidates seeking its degrees. Professor Thompson alluded to a certain class of candidates for the London degrees as "village cobblers."

Dr. ALLCHIN seconded the resolution.

Mr. BOMPAS, Q.C., moved the following amendment: "That in the opinion of Convocation it is essential that in any enlargement or reconstruction of the University of London its existing powers and privileges should be retained unimpaired, the efficient discharge of its present duties should not be interfered with, and the high standard of its degrees should be maintained." He considered that the proposals of the Gresham Committee would destroy the high and almost unique character of the London University degree. He considered that the creation of a second university would be preferable to the scheme of reconstruction.

Mr. T. B. NAPIER, LL.D., seconded the amendment. Dr. SISLEY and Mr. FLETCHER MOULTON, Q.C., having spoken in support of it, Convocation divided, with the result that 206 voted for Professor Thompson's resolution and 175 for the amendment. There was, therefore, a majority of 31 in favour of the resolution.

Professor THOMPSON then moved the second resolution: "That Convocation, while desiring to express generally its approval of the proposals contained in the report of the Royal Commission, is of opinion that power ought to be given to the Statutory Commission to vary the details of the scheme, and that it ought to be made an instruction to the Commissioners, before framing the statutes and regulations, to confer with duly accredited representatives of the Senate and of Convocation as to the modifications which may be desirable."

Mr. COZENS-HARDY, M.P., seconded the resolution.

Mr. MOULTON, Q.C., moved an amendment condemning the Gresham scheme, which was seconded by Dr. COLLINS and lost, the numbers being 157 to 133.

Professor THOMPSON then moved the third resolution: "That a special committee of nine members, including the Chairman of Convocation, be nominated to prepare for presentation to the Statutory Commission, when appointed, a memorandum of points in the scheme of the Royal Commission in which modification is desirable, and with power to confer with such said Statutory Commission and with any committee of the Senate."

Mr. NAPIER, LL.D., seconded the resolution, which was agreed to, and the business of the extraordinary meeting was shortly afterwards completed.

AN ALLEGED "OYSTER EPIDEMIC" OF TYPHOID FEVER.

IN a sense it is to be deplored that side by side with the perfecting of etiological methods the delicacies of our daily lives should be coming one by one beneath strong suspicion as being at times vehicles by which disease may be communicated; and, if these suspicions should ripen into certainties, some of our daintiest morsels must needs suffer sterilisation in the cooking pot before they can be consumed in a spirit of equanimity. That the process

of cooking renders much of our food more palatable is a proposition which few would deny, but it will hardly be contended that such is the case with, for instance, watercress, salads, or oysters. To submit these articles to boiling water, or even to a temperature sufficient to destroy the Eberth-Gaffky bacillus, is equivalent to depriving them of the characteristics in which resides their charm. Still, if the circumstantial evidence attaching to a recent outbreak of typhoid fever is to be allowed the weight which is apparently its due, either our oysters must undergo a process of sterilisation or a stringent supervision must be exercised over the conditions under which oysters are "fattened" and stored for the market. The outbreak referred to occurred at the Wesleyan College, Middletown, Connecticut, and it has been ably reported upon by Professor W. N. Conn.

These are the facts. Between Oct. 20th and Nov. 8th there occurred among the students of the college in question—where, by the way, there were seven separate fraternities—an outbreak of typhoid fever, the acme of which was reached on Nov. 1st. Suspicion in the first instance fell upon the water-supply, but there was no evidence to show that the water was specifically polluted, and the limitation in the distribution of the disease was incompatible with a thesis of water-carriage. It was also found that the lady students of the college were exempt from attack, and this fact, coupled with others, was held to exclude the drainage as a cause of the disease. The origin and distribution of the milk and the general food-supply were carefully scrutinised, but only to be absolved from blame, and it was not possible to trace the outbreak to personal infection; moreover, on analysing the incidence of the disease upon the students it was discovered that, with but three exceptions, the attacks were solely confined to three out of the seven fraternities; and it was noted that the date of onset in the several cases pointed strongly to some single source of infection common to all the members of the three fraternities, who were attacked, be it observed, to the extent of no less than 25 per cent. of their total number. A possible source of infection such as that referred to occurred in the evening of Oct. 12th, when all the fraternities held their annual initiation supper, and by a process of exclusion it was found that the only articles of diet common to the three fraternities attacked and not to the other four were the raw oysters obtained from a certain oyster dealer.

Of the four fraternities who remained free from attack two consumed no oysters at all, one had cooked oysters, and the other obtained their oysters from a separate dealer. It was found, too, that on a thesis of oyster infection two out of the three exceptions to which reference has already been made vanished; both of them had partaken of the oysters in question. This, however, is not all. There were at the feast certain old students who did not reside in Middletown, as also five Yale College students; and as a result of inquiries which were set on foot it was ascertained that, out of the twenty old students concerning whom replies were received, two cases of typhoid fever had occurred simultaneously with those which had developed at the Wesleyan College, and there were also three attacks of an anomalous illness. Among the five Yale students there developed, four weeks from the date of the supper, two cases of typhoid fever, and although this is a long incubation period it can hardly be held to put the supper out of court—more especially when considered in conjunction with the fact that an exactly similar incubation period was observed in one of the Wesleyan College cases.

Curiously enough, too, there occurred at Amherst College an outbreak of typhoid fever at the same time as that which occurred at Middletown, and it was ascertained that not only was there an initiation supper at Amherst on the evening of Oct. 12th, but that the oysters eaten at the feast were from the same source as those supplied to the Wesleyan College.

The suspected oysters were, it appears, taken from the deep water of Long Island Sound, but before being eaten they were deposited for a day or two in a fresh-water estuary to "fatten." Within 400 feet of the spot where these oysters were placed was the outlet of a private sewer, coming from a house in which were two cases of typhoid fever; and although a physician was only called in on Oct. 11th, and the oysters were removed from the estuary on Oct. 10th, it is to be inferred, as Professor Conn remarks, that the two patients had been suffering from typhoid fever and their excreta had passed into the sewer prior to this date.

Specimens of oysters taken from the freshening grounds were forwarded to Dr. Foote of Yale College, and he was able to demonstrate that if typhoid bacilli were introduced between the valves of the oysters the bacilli remained alive a sufficient length of time to enable the oysters to be transferred to Middletown and be consumed at the banquet. This outbreak is certainly of very considerable interest and importance; and when one has regard to what apparently is a fact, that the typhoid germs remain for a long time alive in sea water, and to the belief that oysters are now and again deposited near to sewage outfalls, the fact that we only now hear of oyster enteric fever is somewhat surprising. Obviously, however, all the factors necessary to bring about infection through oysters can be but rarely present, and by the exercise of some foresight and supervision it will surely be possible to reduce the risk of oyster-eating to a minimum. In any case the result of the investigation of our own Local Government Board into the subject will be awaited with much interest.

REPORTS OF THE ASSISTANT MEDICAL OFFICERS OF THE LONDON COUNTY COUNCIL.

MANY persons actively though not officially engaged in the work of bettering the houses of the poor expressed no small dissatisfaction when, by the Public Health Act (London), 1891, the conduct of local inquiries was transferred from the Home Office and Local Government Board to the London County Council; and there can be no doubt that the moral effect of, and the public interest excited by, a quasi-judicial inquiry held in open court and fully reported in the local press were most wholesome. But since the appointment of two assistants to the medical officer of the Council, able to devote the requisite time to house-to-house inspection and personal verification of the representations made to the Council, a series of careful reports have been drawn up and printed in the familiar form of those of the inspectors of the Local Government Board, and we may well hope that, whether as records of past shortcomings, indications of improvement, or as affording guidance for future progress, their effect will be more enduring than that of the more obtrusive public inquiries. We have before us the three last issued: Dr. Young's report on Deptford and Dr. Hamer's reports on Whitechapel and on Mile End, the bodies on whose representations these inquiries were held having been the Mansion House Council on the Dwellings of the Poor and the Jewish Board of Guardians. Of these, Mile End appears in the most favourable aspect, though probably not less from natural and social advantages than from any greater activity on the part of the sanitary administration, for in addition to the usual complaints of tardy action, insufficient staff, prevalence of nuisances, overcrowding, &c., we note that in none has there been any attempt to enforce or even to adopt regulations as to houses let in lodgings, one of the greatest powers for good possessed by our local authorities. Dr. Hamer, who deals with the social conditions of the inhabitants of these districts more fully than his colleague, makes considerable use of the statistics of Mr. Charles Booth's work, "The Labour and Life of the People"; he has, moreover, been able to give the death-rates when corrected by the factor for age and sex correction, so much needed in a rapidly growing industrial population.

Dr. Hamer touches upon a point of considerable interest in his discussion of the constitution of the Whitechapel population. He quotes from the Board of Trade report on Immigration, 1894, that "the total number of the class with whom we are specially concerned [foreign immigrants] who arrived in London without through tickets to other countries, less those subsequently sent away by sanitary agencies, was in 1891 something over 7000, in 1892 about 3000, and in 1893 rather below this latter number. These figures, then, setting off the early part of this year against that of 1891, have to be added to those of the census to arrive approximately at the numbers for the present time." On the last census night, Dr. Hamer tells us, Whitechapel housed 13,538 Russians and Russian Poles, as compared with 26,742 in the whole of London, and he then proceeds to show that, on the assumption that the new arrivals for settlement during 1891-3 were distributed to Whitechapel in a like proportion, the census figures relating to the

number of such persons in Whitechapel would require to be increased by upwards of 6000 in order to make them applicable to the early part of the year 1894. This statement gives a fair insight into the conditions with which the sanitary Council's medical officer that, "under these circumstances, the authority have to contend, and establishes the claim of the need for a strong sanitary staff is obvious"; but, he points out, "compared with other districts which more nearly approach to it in the character of the population and the condition of the houses, the sanitary staff of Whitechapel is, notwithstanding the recent increase, numerically weak." It is to be hoped that the Whitechapel district board, who evidently have in Mr. Loane a capable and zealous medical officer of their own, will respond to the invitation to strengthen their staff so that it may be better able to cope with the exceptional conditions of their district.

The recommendations of the Council's medical officer as to Mild-end depend upon the need of an increased staff to deal with houses let in lodgings to which we have referred. The report will doubtless strengthen the hands of Mr. Taylor, the medical officer of health, in providing him with the assistance which will be necessary to enforce the by-laws which the sanitary authority are preparing.

Dr. Young's report on Deptford gives graphic descriptions of dilapidated premises and overcrowding. In this district overcrowding was frequently found, and but little effort had been made to inspect workshops; and, further, the need for better organisation of the staff of sanitary inspectors was pointed out. Fortunately the London County Council are armed with considerable powers in the event of failure of sanitary authorities to comply with the Council's reasonable demands, and in respect to these districts the Council are now possessed of ample information to guide them to a safe and just conclusion. It may be expected, however, that the cogency of the arguments in the reports will suffice to lead to those changes which are recommended.

THE MEDICAL PROFESSION AND FREEMASONRY.

WE have been favoured by Mr. R. F. Gould with a copy of the paper bearing the above title,[1] which he read before the Quatuor Coronati Lodge towards the end of last year. It is a remarkable and rare circumstance to find a layman not only couching his lance in defence of, but actually riding into the arena and casting down his gauntlet as champion and herald of, the claims of the medical profession. It has sometimes been ungraciously and ungratefully suggested that our profession as a profession is a little prone to sound its own trumpet. This we are not concerned either to allow or very strenuously to deny. But assuredly medical men—always in their collective, and often and notably in their individual, capacity—render more useful service to their country than the members of any other profession or body of men whatsoever. Not less assuredly do they, in this country at any rate, fail to receive in recognition of that service those high honours and rewards which are bestowed freely on the eminent divine, the barrister learned in the law, or even the successful trader or persistent (and useful-to-his-party) politician. What nation should not be proud to welcome as a member of its Upper House of Parliament a Lister or a Paget, a Jenner or a Reynolds? When, therefore, we find Mr. Gould coming forward to break a lance on our behalf we feel disposed in very gratitude to give to his achievements a little more of our space than the purely general interest to our readers of the subject of Freemasonry would in itself warrant. And as it is probable that there is hardly a local lodge of Freemasons in the country which does not include "the doctor" among its members, whilst most London lodges have many medical "brothers" on their roll (there is one lodge in London—the "Esculapius"—membership of which is restricted to medical practitioners),[2] we are glad to give the publicity of our columns to his researches. It may be well to say here that Mr. Gould is well known as a Masonic student, and is the author of a standard work on the History of Freemasonry, and that the task he has set himself is to prove that the medical profession has distinguished itself more than any other in the service of Symbolical Masonry. He says: "I must show you, if I can, that it is by the influence of brethren who have been, or are, practitioners in medicine or surgery, more than to the members of any other single profession, that Freemasonry has been shaped and moulded into the form, or perhaps it would be best to say the system (or set of systems), in which we now possess it."

It is rather startling to find (and Mr. Gould gives it with due caution as "tradition") that "Noah was a distinguished writer on medicine, and the possessor of a library, which he bequeathed to his son Shem. Shem was also celebrated for his knowledge of the medical art, and so was King Solomon (Story of the Jews, 270)."

He then deals with the Alchemists, Cabbalists, Hermetical Philosophers, and Rosicrucians, and mentions amongst others Avicenna, Averroes, Maimonides, Paracelsus, Hermes Trismegistus, J. P. van Helmont, Robert Fludd, and Michael Maier. It is to be observed that he states it "is a remarkable fact that the leading alchemists of the Middle Ages, or hermetical philosophers, if not actually physicians (as occurred in the majority of instances), were medical writers of weight and reputation." Dealing with "the moderns" in Part II., Mr. Gould writes, referring to the erection of Grand Lodges, of which the first was that of—

> "England, established A.D. 1717. The Duke of Montague accepted the Grand Mastership in 1721, and the society rose at a single bound into notice and esteem. The first of our 'Noble Grand Masters' was a Fellow of the Royal College of Physicians (as was also the fourth of the series, the Duke of Richmond). The first Deputy Grand Master was Dr. John Beale, 1721; and the first Initiate—after a Masonic torpor of some duration—was Dr. William Stukeley, whose admission took place in the same year."

It is interesting to note that in the foundation of the three great Masonic charities members of the medical (if we include the dental) profession were intimately concerned—Chevalier Bartholomew Ruspini with that of the Royal Masonic Institution for Girls, Surgeon F. C. (afterwards Sir F. C.) Daniel with that of the Royal Masonic Institution for Boys, and Dr. R. T. Crucefix with that of the Royal Masonic Benevolent Institution. Amongst office-bearers of the Grand Lodge of England since 1813 we note the following names:—John Havers (described as "the greatest Masonic statesman of the century"), Thomas Joseph Pettigrew, three past Presidents of the Royal College of Surgeons of England—viz., Henry Hancock, J. Cooper Forster, and Sir Erasmus Wilson,—Alfred Meadows, and W. Rhys Williams, as well as several members of the profession who are happily still alive.

We need offer no excuse for reproducing the following interesting reference to—

> "Edward Jenner, the discoverer of vaccination, who was born at Berkeley, Gloucestershire, in 1749, after studying in London under John Hunter, settled at his native place as a medical practitioner. In the Grand Lodge Register, *London book*, there appears at the No. 449, and under the year 1792, *Country Stewards Lodge* (constituted July 25, 1789). The last entry is dated 1793, and a memo states—'Removed to Berkley, Gloucester.' In the *Country book*, and at the same *number*, 449, will be found, '*Lodge of Faith and Friendship*, Berkely, Gloc.'; also the words—'Removed from London.' Among the entries are,
>
> "'4. Nov. 1802, Wm. Fitzharding Berkeley, Ld. Viscount Dursley, age 17, Berkly Castle,' and
>
> "'30 Dec. 1802, Ed. Jenner, M.D., Berkly.'
>
> "It would seem probable that Dr. Jenner had been initiated in earlier life, and became one of the first joining members of what was virtually a new Lodge established at the place of his abode?"

Then follows a long but necessarily very incomplete list of living medical Masons. Under Scotland we need only allude to the names of Sir William Fergusson and Sir James Young Simpson. In Ireland we note that many distinguished living members of the profession are Masons. Mr. Gould deals at some length with foreign countries, but space forbids our doing more than recording that it was of an American physician and Mason, Dr. Winslow Lewis, that Oliver Wendell Holmes wrote:—

> "You hear that man laugh? You think he's all fun,
> But the angels laugh too at the good he has done;
> The children laugh loud as they troop at his call,
> And the poor man that knows him laughs loudest of all."

In the discussion which followed the reading of the paper the rival claims of the profession of divinity and the army were advanced, but Mr. Gould stuck firmly to his text that "*the first place of all*, from among the professions, in the

[1] Margate: Printed at "Keble's Gazette" Office. 1894. [Reprinted from "Ars Quatuor Coronatorum."]

[2] Curiously enough, a letter from Dr. Dutton, the Secretary of the Esculapius Lodge, is published in our present issue, which likewise contains an appeal from a distinguished medical Mason, Dr. F. E. Clarke, on behalf of the masonic memorial which is being raised to the late Surgeon-Major Parke.

history and expansion of *Symbolical Masonry*, I submit, must be freely conceded to our medical brethren." We have little criticism to make, but must express our regret that Mr. Gould has made any endeavour to estimate the *professional* work of still living medical men—a task which is quite beyond the province of any layman. The result is sometimes almost comical—for example, a distinguished physician of the London Hospital is set down as "Examiner in Medicine, R.C.S.," *et præterea nihil*. We notice also one or two trivial inaccuracies—such as that a certain brother belongs to a lodge of which we happen to know that he was never a member and the misspelling of Mr. Cooper Forster's name. It would be strange, however, in a work which must have involved such enormous labour and research if a few slight errors had not occurred. On behalf of the medical profession we tender thanks to the author for the pains he has taken to support their claims in connexion with Freemasonry.

SMALL-POX IN OLDHAM IN 1893.

THE last report by Dr. Niven in his capacity of medical officer of health for the borough of Oldham has just been issued, and though late in appearing, having reference to 1893, it is not without present interest. The section wherein the epidemic of small-pox is treated in its relationships with vaccination and with the Westhulme Small-pox Hospital is especially of interest just now. The cases of that disease treated in the hospital during 1893 were 638 in number, and of these 403 came from the several wards of the borough, and other 167 and 41 respectively from the adjacent local board districts of Chadderton and Royton. The borough cases yield an attack rate of nearly 30 per 10,000 of estimated population, and the 41 deaths a mortality rate of 3 per 10,000 living. The epidemic was a continuance of the prevalence of 1892, during which year 75 cases came to the knowledge of the medical officer of health. The prevalence of 1892 could be assigned to three causes—namely, the potency for harm of the Westhulme Hospital, the prejudice existing against vaccination, and the non-recognition of mild cases of the disease.

In regard to vaccination the hospital data for 1893 are very striking, as the following statement shows. Among the 638 cases there were 64 deaths, a mortality rate of 10 per cent. of attacks; but this rate was made up of 3·6 among the 472 vaccinated patients, of whom 17 died; and of 27·6 among the 156 unvaccinated patients, of whom 43 died. Of 10 cases "doubtful" as to vaccination 4 proved fatal. Stated in age periods the figures run thus:—

Hospital Cases.

At ages—	Admitted.		Died.		Mortality per cent. of attacks.	
	Vaccinated.	Not vaccinated.	Vaccinated.	Not vaccinated.	Vaccinated.	Not vaccinated.
0 to 5	14 } 49	56 } 115	1 } 1	18 } 27	7·1 } 2·0	32·1 } 23·5
5 to 15	35 }	59 }	0 }	9 }	0·0 }	15·3 }
15 to 25	152	16	3	5	2·0	31·2
25 to 35	155	21	4	7	2·6	33·3
35 to 45	79	3	5	3	6·3	100·0
45 and upwards.	37	1	4	1	10·8	100·0
Totals at all ages	472	156	17	43	3·6	27·6

Dr. Niven well says that the figures are unmistakable in their significance. Without the differentiation of the vaccinated class among primary and revaccinations, which is wanting in the report, we see small-pox among the unvaccinated as compared with the vaccinated nearly eight times as fatal at all ages and nearly twelve times as fatal in the first fifteen years of life. The remaining data speak for themselves.

As regards hospital influence, Dr. Niven, proceeding on the same lines as in 1892, has arrived at the following figures, which represent the number of cases of small-pox in each 100 houses around the Westhulme Small-pox Hospital: quarter-mile zone round hospital, 12·9; between quarter and half-mile zone, 6·6; half-mile and three-quarter mile zone, 2·0; three-quarter and one mile zone, 1·5; outside the mile radius, 0·8. The steadily diminishing incidence of small-pox is well marked as the distance from the hospital increases. If the outside radius attack rate be taken as unity, the several quarter-mile radii become 1·9, 2·5, 8·2, and 16·1 as we approach the institution. The effect thus attributed to the hospital is not to be looked upon merely as a continuance of the heavy incidence arising out of the 1892 prevalence and to be accounted for by the spread of the disease by personal infection or the like, since, among other things, there had been much more vaccination practised in the vicinity of the hospital than in other parts of the town; whilst on the removal of acute cases outside the town towards the close of 1893 attacks ceased to occur near the hospital, and the disease speedily died out entirely. We can add the testimony of Oldham in 1893 to the evidence now so largely accumulating to show the potency for harm of small-pox hospitals upon adjacent populations. The need for vaccination and revaccination of such—and, indeed, all—populations is no less evident.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Dr. H. T. Bulstrode's Report on the Sanitary Condition of the Village of Linslade, and on Diphtheria there.—The village of Linslade, which had in 1891 a population of 1982, is described as within the Leighton Buzzard rural district, contiguous to the town of that name, and as really urban in character. But though urban in type it lacks all the requirements of an urban district. The water-supply is from local wells, which, though of some depth, are dry-steined, and are placed in such relation to privies and other sources of filth that, according to Mr. Sandell, the medical officer of health, three-fifths of them are polluted. And Dr. Bulstrode takes occasion to say that Mr. Sandell is an energetic and an accurate officer. The sewerage of Linslade involves the humorous fact that, though glazed pipe sewers of nine-inch and fifteen-inch glazed ware were laid some thirty years ago, no one could find them, and Dr. Bulstrode, having sought some external evidence of their situation, can only say that in so far as the ordinary visible means of ventilation, inspection, and flushing are concerned these do not exist. But the two streams in Linslade are exceptionally foul, and they are admitted to have been the cause of well-nigh endless complaints because they have been turned into open sewers. Of closet arrangements the only good thing that can be said is that in those cases where pail-closets are resorted to, and these are replacing the vault privies, a scavenger does the cleansing and removes the contents. In 1894 there were thirty-three cases of diphtheria in twenty-four houses in Linslade, and school operations served largely to extend the disease, school closure being freely resorted to in order to control its diffusion. The description given by Dr. Bulstrode as to Linslade and the surroundings of the houses is by no means complimentary to the sanitary authority and their administration of the place; and he tells the local sanitary authority, through his official report, that "it is difficult to see how, in view of his multitudinous duties," the inspector of nuisances, competent as he may be, "is able to devote proper attention to the Leighton Buzzard rural sanitary district."

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Lancaster County Sanitary District.—Some idea of the urban character of the county may be gathered from the fact that Mr. Edward Sergeant, the county medical officer of health, has received reports from district medical officers of health representing 112 urban and 23 rural districts. Two local authorities have failed to furnish reports to the County Council, and Mr. Sergeant suggests that the Local Government Board should be communicated with on the subject. We are sorry to hear from Mr. Sergeant there "is evidence of an increasing tendency on the part of medical officers of health to modify the vital statistics of their districts by the undue exclusion of deaths." It appears that a very considerable number of deaths which took place in the county have

not been accounted for in the reports of medical officers of health. Mr. Sergeant has done well to call attention to this omission. The infantile mortality in many parts of the county was exceptionally high during 1893, more especially in some of the colliery districts; Mr. Sergeant remarks that the latter fact suggests that the conditions incidental to the late coal strike may have had some influence either directly or indirectly in bringing about the increased infantile mortality, and this opinion seems to be shared by several of the district medical officers of health. Mr. Sergeant thinks that section 17 of the Factory and Workshop Act (1891), which prohibits the employment of women within four weeks of childbirth, should have a very salutary effect, but he adds that so far no information has come beneath his notice as to the working of this section. In relating the history of small-pox in the county Mr. Sergeant refers to the fact that in the districts of Chadderton and Failsworth the introduction of small-pox was attributed to infection conveyed from the Westhulme Hospital belonging to the corporation of Oldham. Dr. Patterson of Chadderton states in his annual report that during the two months in which the Westhulme Hospital remained free from acute small-pox not a single case occurred in Chadderton. Mr. Sergeant quotes figures from the report of the Local Government Board (1892-93), showing how the Vaccination Acts are carried out in the several districts in Lancashire. The proportion of children not finally accounted for as regards vaccination varies from 74·4 per cent. in the Oldham Union to only 1·3 per cent. in the Bolton Union. In connexion with phthisis Mr. Sergeant remarks that, although the notification of the disease may be theoretically desirable, there are several practical objections to the way of carrying it into effect, and he points out that for the present the efforts of sanitary authorities can be properly directed to the amelioration of those conditions tending to favour the development of the disease. Eighty-four per cent. of the population of the county is, Mr. Sergeant states, protected by the provision of compulsory notification. Prestwich during 1893 added measles to its list of notifiable diseases, but Clayton-le-Moors relinquished it "from a financial point of view." In referring to the Isolation Hospitals Act, 1893, Mr. Sergeant remarks that "the necessity of separate hospitals specially isolated for the treatment of small-pox emphasises the importance of combination." The Housing of the Working Classes Act, 1890, does not seem to be carried out with much energy in Lancashire, and Mr. Sergeant tells us that comparatively few inspections are reported to have been made under the Act. Dairies, cowsheds, and milkshops do not, it appears, receive sufficient supervision in this county, and in some districts they are entirely ignored. Dwellers in manufacturing districts will read with pleasure the following extract from the report before us: "Private enterprise at Chadderton and Middleton has proved successful in reducing the smoke nuisance in those districts, and the fact has been effectually demonstrated that with boiler furnaces properly constructed the complete abolition of smoke is quite possible." A summary of the several district reports is given by Mr. Sergeant, and at the close of his report are full statistical tables.

Sheffield Urban Sanitary District.—The corrected death-rate of Sheffield during 1893 was 24·01 per 1000, a slight increase on the preceding year. The fluctuations in the infantile mortality for the last six years are shown below:—

Year.	Per 1000 births.	Year.	Per 1000 births.
1888	179	1891	170
1889	170	1892	167
1890	195	1893	193

After carefully studying the distribution of enteric fever in Sheffield Dr. Harvey Littlejohn reports that there is a comparative freedom from the disease in those parts where waterclosets are in use, whereas in those portions of his district where midden privies are in vogue there is frequent recurrence of the disease, more especially in yards and houses using a midden privy in common; in fact, Dr. Littlejohn tells us that he hopes to be able to show at a future date that enteric fever has often reappeared year after year in the yards and localities where the midden has once received the discharge of an infected person. Dr. Littlejohn refers to the great difficulty of ensuring proper disinfection of excreta in the houses of the ignorant poor and to the impossibility of efficiently disinfecting a capacious midden privy. He also lays stress on the desirability of hospital isolation in typhoid fever. Six deaths were registered in Sheffield as due to plumbism during 1893, but five out of the six were brought in contact with the metal in their employment, and the sixth acquired the disease five years ago, apparently from the water as then supplied to Sheffield. The notification of erysipelas is, Dr. Littlejohn considers, of doubtful value, and he has not met with any instances where the disease spread from the infected person to members of the same family. It has been resolved to erect a separate small-pox hospital for thirty-two beds, but apparently further isolation accommodation will be required before long. It is very gratifying to learn that since higher salaries have been given to sanitary inspectors and more experienced men obtained the routine work in dealing with the abatement of nuisances has been carried on with less friction. In the matter of smoke prevention steady improvement appears to be taking place from year to year, and the following figures show the average number of minutes per hour during which black smoke has been observed since 1889:—

Year.	Minutes.	Year.	Minutes.
1889	11·0	1892	5·2
1890	7·0	1893	2·8
1891	6·3		

Under Part II. of the Housing of the Working Classes Act, 1890, thirty-six houses were condemned during 1893 as unfit for human habitation, and under Part I. Dr. Littlejohn received an official representation from twelve ratepayers as to a crowded and insanitary area in the centre of the town. He was able to demonstrate that the mortality-rate in the area referred to was much in excess of those in the borough as a whole, and an improvement scheme has been prepared for dealing with the area in question.

Glamorgan County Sanitary District.—Only a small proportion of the district reports in this county are printed, and there is, we regret to say, little or no improvement in this direction since 1892. It is somewhat a serious reflection upon the local authorities that they do not evince sufficient interest in the sanitary affairs of their district to wish even to peruse the reports of their medical officers of health. Dr. W. Williams, the county medical officer of health, remarks that there is a want of uniformity in certain reports as to the calculation of zymotic death-rates, some medical officers of health including influenza and erysipelas, others excluding diarrhœa. It appears, too, that in some districts proper allowances are not made for deaths in public institutions in calculating the vital statistics. Weekly returns of notifiable infectious diseases are made to Dr. Williams and the complete list is issued by him to all the district medical officers of health. Since Dr. Williams's appointment he has made a sanitary survey of the whole administrative area, so that he is well informed as to the general sanitary condition of the county. The general death-rate for the urban districts was during 1893 19·2 and for the rural districts 19·1 per 1000. There was, however, considerable discrepancy between the urban and rural districts in the matter of infantile mortality, the rate for the former being 168·4 per 1000 births, as against 135 for the latter. Dr. Williams urges upon the Glamorgan County Council the desirability of following the examples of such county councils as have established lectures for sanitary inspectors in their respective counties. Diphtheria and croup are, it seems, but little known in Glamorgan and are confined to certain districts. Puerperal fever caused 67 deaths in this county during 1893, the case mortality being 72·8 per cent., and Mr. Dyke, one of the district medical officers of health, very properly calls attention to the danger caused by midwives laying out the bodies of dead persons while they are attending to their usual duties. Dr. Williams has recently presented to the county council a report embodying returns from several of the local authorities as to isolation accommodation and the action taken under the Housing of the Working Classes and the Rivers Pollution Prevention Acts. The returns in several instances are far from satisfactory. In the return as to the Housing of the Working Classes Act we see that in some places the Act has not been "adopted."

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6809 births and 4407 deaths were registered during the week ending Jan. 19th. The annual rate of mortality in these towns, which had increased in the preceding three weeks from 18·0

to 20·1 per 1000, further rose last week to 21·7. In London the rate was 20·0 per 1000, while it averaged 22·9 in the thirty-two provincial towns. The lowest rates in these towns were 12·9 in Plymouth, 14·4 in Cardiff, 15·1 in Leicester, 17·9 in Nottingham, and 18·9 in Birkenhead; the highest rates were 27·9 in Birmingham, 28·3 in Liverpool, 29·3 in Bolton, 30·7 in Sunderland, and 33·4 in Wolverhampton. The 4407 deaths included 338 which were referred to the principal zymotic diseases, against 399 and 363 in the preceding two weeks; of these, 96 resulted from measles, 66 from whooping-cough, 63 from diphtheria, 49 from diarrhœa, 36 from "fever" (principally enteric), 25 from scarlet fever, and 3 from small-pox. No fatal case of any of these diseases occurred last week in Halifax; in the other towns they caused the lowest death-rates in Nottingham, Cardiff, Bristol, and Sheffield, and the highest rates in Croydon, Sunderland, Newcastle-upon-Tyne, Salford, and Gateshead. The greatest mortality from measles occurred in Plymouth, Newcastle-upon-Tyne, Leeds, Portsmouth, and Gateshead; and from whooping-cough in Newcastle-upon-Tyne, Blackburn, and Preston. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 63 deaths from diphtheria included 31 in London, 6 in Birmingham, 4 in West Ham, and 3 in Liverpool. Two fatal cases of small-pox were registered in Birmingham, and 1 in London, but not one in any other of the thirty-three large towns. There were 33 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 19th inst., against 16, 23, and 28 at the end of the preceding three weeks; 6 new cases were admitted during the week, against 8 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 1653, against 1890, 1779, and 1713 on the preceding three Saturdays; 154 new cases were admitted during the week, against 116, 126, and 130 in the preceding three weeks. The deaths referred to diseases of the respiratory organs in London, which had been 319 and 389 in the preceding two weeks, further rose last week to 399, but were as many as 362 below the corrected average. The causes of 82, or 1·9 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Cardiff, Bolton, Newcastle-upon-Tyne, and in six other smaller towns; the largest proportions of uncertified deaths were recorded in West Ham, Salford, Burnley, Blackburn, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·8 and 25·5 per 1000 in the preceding two weeks, further rose to 28·3 during the week ending Jan. 19th, and exceeded by 6·6 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 13·7 in Perth and 21·0 in Aberdeen to 31·0 in Glasgow and 31·8 in Greenock. The 817 deaths in these towns included 45 which were referred to measles, 19 to whooping-cough, 12 to diarrhœa, 9 to diphtheria, 7 to scarlet fever, 5 to "fever," and 3 to small-pox. In all, 100 deaths resulted from these principal zymotic diseases, against 81 and 113 in the preceding two weeks. These 100 deaths were equal to an annual rate of 3·5 per 1000, which exceeded by 1·8 the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 38 and 58 in the preceding two weeks, declined to 45 last week, of which 24 occurred in Glasgow, 13 in Edinburgh, and 6 in Aberdeen. The 19 deaths referred to whooping-cough corresponded with the number in the preceding week, and included 13 in Glasgow and 3 in Greenock. The fatal cases of diphtheria, which had been 4, 11, and 14 in the preceding three weeks, declined again to 9 last week, of which 3 occurred in Edinburgh and 3 in Leith. The deaths from scarlet fever, which had been 8 and 6 in the preceding two weeks, were 7 last week, and included 2 in Glasgow and 2 in Aberdeen. Of the 5 deaths referred to different forms of "fever," 3 occurred in Glasgow; and of the 3 fatal cases of small-pox 2 were registered in Edinburgh and 1 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 154 and 215 in the preceding two weeks, further rose to 235 last week, and exceeded by 85 the number in the corresponding period of last year. The causes of 62, or nearly 8 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased from 25·4 to 31·0 per 1000 in the preceding three weeks, further rose to 40·9 during the week ending Jan. 19th, a higher rate than in any week since January, 1894. During the past three weeks of the current quarter the death-rate in the city has averaged 33·4 per 1000, against 18·9 in London and 24·5 in Edinburgh. The 274 deaths registered in Dublin during the week under notice showed an increase of 66 upon the number in the previous week, and included 23 which were referred to the principal zymotic diseases, against 10 and 19 in the preceding two weeks; of these, 10 resulted from small-pox, 4 from whooping-cough, 4 from "fever," 4 from diarrhœa, 1 from scarlet fever, and not one either from measles or diphtheria. These 23 deaths were equal to an annual rate of 3·4 per 1000, the zymotic death-rate during the same period being 1·7 in London and 4·9 in Edinburgh. The fatal cases of small-pox, which had been 5 and 11 in the preceding two weeks, were 10 last week. The deaths referred to different forms of "fever," which had been 2 and 3 in the preceding two weeks, further rose to 4 last week. The 4 fatal cases of whooping-cough also showed a further increase upon those recorded in recent weeks. The 274 deaths registered in Dublin last week included 41 of infants under one year of age and 80 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons considerably exceeded those recorded in any recent week. Five inquest cases and 6 deaths from violence were registered; and 102, or more than a third, of the deaths occurred in public institutions. The causes of 27, or nearly 10 per cent., of the deaths in the city last week were not certified.

VITAL STATISTICS OF LONDON DURING 1894.

COMPLETE statistics relating to sickness and mortality during the year 1894 in each of the forty-three sanitary districts of London are summarised in the accompanying table. The mortality statistics relate to the deaths of persons actually belonging to the various sanitary districts, and are the result of a complete system of distribution of deaths occurring in the institutions of London among the various sanitary districts in which the patients had previously resided. With regard to the notified cases of infectious diseases in London during 1894, it appears that the number of persons reported to be suffering from one or other of the nine diseases in the accompanying table was equal to 9·4 per 1000 of the population, estimated at 4,349,166 persons in the middle of the year. In the preceding two years the rates were 10·8 and 15·7 per 1000 respectively. Among the various sanitary districts the lowest rates were 5·1 in St. Martin-in-the-Fields and in Strand, 5·5 in Stoke Newington, 5·6 in Westminster, 5·7 in City of London, 6·2 in Hampstead and St. Giles, and 6·4 in St. James Westminster; the highest rates were 11·5 in Marylebone, 11·7 in Plumstead, 12·1 in Greenwich, 12·2 in Bethnal-green, 12·5 in Limehouse, 12·6 in St. George-in-the-East, 12·9 in Poplar, and 15·9 in Rotherhithe. The prevalence of small-pox in London showed a marked decline during 1894, the cases notified being 1192, against 423 and 2813 in the preceding two years; of these, 308 belonged to Marylebone, 113 to Poplar, 97 to St. Pancras, 85 to Bethnal-green, 84 to Islington, 45 to Mile End Old Town, 40 to Fulham, and 36 to Hackney. The number of small-pox patients admitted into the Metropolitan Asylum Hospitals during 1894 was 1234, and 16 remained under treatment at the end of the year. The prevalence of scarlet fever in London during 1894 showed a very marked decline, 18,446 cases being notified, against 36,901 during 1893; this disease was proportionally most prevalent in Limehouse, Mile End Old Town, Rotherhithe, Battersea, Greenwich, Woolwich, and Plumstead sanitary areas. During the year under notice 11,767 scarlet fever patients were admitted into the Metropolitan Asylum Hospitals; the number under treatment, which had been 2872 at the beginning of the year, was 1865 at the end of December last. Diphtheria also showed decreased prevalence during 1894, the cases notified being 11,186, against 5907, 8349, and 13,694 in the preceding three years; this disease showed the highest proportional prevalence in Bethnal Green, St. George-in-the-East, Limehouse, Mile End

MONTHLY ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING 1894.

(Specially compiled for THE LANCET.)

Sanitary areas.	Estimated population in the middle of 1894.	Notified Cases of Infectious Disease.										Deaths from Principal Infectious Diseases.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.†	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON	**4,349,166**	**1192**	**18,446**	**11,186**	**21**	**3360**	**162**	**253**	**6060**	**21**	**40,721**	**9·4**	**89**	**3291**	**961**	**2637**	**2094**	**5**	**608**	**13**	**1769**	**11,467**	**2·6**	**75,434**	**17·4**	**143**
West Districts.																										
Paddington	121,583	28	228	393	—	71	3	5	123	—	901	7·4	3	66	14	93	45	—	19	—	49	289	2·4	1826	15·1	137
Kensington	167,350	17	385	279	1	87	8	8	188	—	971	5·8	—	111	22	77	58	—	21	3	57	349	2·1	2847	16·9	173
Hammersmith	105,696	10	330	189	—	54	4	5	95	—	687	6·5	—	71	14	50	59	—	15	—	47	256	2·4	1712	16·2	147
Fulham	110,993	40	535	344	—	38	1	9	115	—	1082	9·8	3	161	33	105	60	—	5	1	57	425	3·8	1897	17·1	149
Chelsea	99,052	14	318	251	1	92	1	10	142	—	829	8·4	—	70	16	82	38	—	14	1	33	224	2·3	1619	16·4	131
St. George Hanover-square	75,033	11	257	106	—	66	4	1	52	—	497	6·6	1	31	11	19	21	—	12	—	10	105	1·4	1063	14·5	115
Westminster	54,414	1	148	73	—	46	1	—	33	—	302	5·6	—	35	7	26	21	—	5	—	14	108	2·0	991	18·3	138
St. James Westminster	23,571	3	59	38	—	24	2	1	23	—	150	6·4	1	13	3	15	7	—	8	—	6	52	2·2	393	16·7	144
North Districts.																										
Marylebone	138,554	308	560	287	1	151	6	10	261	—	1584	11·5	29	88	40	73	40	—	23	—	35	328	2·4	2662	19·3	130
Hampstead	75,443	18	232	99	—	49	1	5	66	—	470	6·2	3	31	10	19	26	—	6	1	8	104	1·4	798	10·6	113
St. Pancras	233,739	97	1274	511	1	200	2	12	468	1	2566	11·0	8	95	51	118	115	1	38	—	84	510	2·2	4256	18·3	145
Islington	331,900	84	1512	882	1	267	7	24	410	—	3187	9·6	3	204	69	221	195	—	36	—	119	847	2·6	5266	15·9	130
Stoke Newington	34,172	3	92	54	—	16	—	1	23	—	189	5·5	—	2	6	5	8	—	3	—	5	29	0·9	334	9·8	86
Hackney	211,493	36	1030	581	—	195	9	14	265	—	2130	10·1	1	186	57	122	68	—	38	—	82	554	2·6	3241	15·4	127
Central Districts.																										
St. Giles	38,144	7	87	43	1	34	—	—	63	—	235	6·2	1	15	2	14	27	—	8	—	11	78	2·1	757	19·9	132
St. Martin-in-the-Fields	13,733	1	21	17	—	15	1	—	15	—	70	5·1	—	9	1	6	5	—	2	—	4	27	2·0	266	19·4	210
Strand	23,179	5	56	29	—	15	1	—	11	—	117	5·1	—	16	1	9	21	—	7	—	8	62	2·7	524	22·7	179
Holborn	32,438	8	80	72	—	29	—	—	77	—	266	8·2	—	23	—	20	21	—	7	—	10	81	2·5	660	20·4	180
Clerkenwell	65,312	7	223	162	—	66	2	4	101	—	565	8·7	—	49	10	34	38	—	8	—	35	174	2·7	1243	19·1	145
St. Luke	41,168	16	124	64	—	15	1	—	95	—	315	7·7	1	14	10	15	18	—	3	—	26	87	2·1	965	23·5	123
City of London	34,832	1	80	43	—	31	—	1	42	—	198	5·7	—	3	9	6	11	—	6	—	4	39	1·1	679	19·5	160
East Districts.																										
Shoreditch	123,186	29	486	302	—	80	3	5	198	—	1103	9·0	2	69	28	75	93	1	12	—	70	350	2·8	2450	19·9	160
Bethnal Green	129,840	85	512	559	2	146	7	8	262	1	1582	12·2	5	135	27	133	70	—	27	—	60	457	3·5	2642	20·4	151
Whitechapel	75,498	11	269	181	—	36	—	7	99	—	603	8·0	—	66	23	46	52	—	10	—	34	231	3·1	1613	21·4	154
St. George-in-the-East	45,360	5	219	206	—	62	1	3	72	—	568	12·6	—	49	18	51	41	—	6	—	59	224	5·0	1196	26·4	185
Limehouse	57,000	9	376	194	—	45	2	3	83	—	712	12·5	1	93	33	51	27	—	8	—	31	244	4·3	1403	24·7	174
Mile End Old Town	106,242	45	578	347	—	79	—	4	163	—	1216	11·3	4	157	37	82	74	—	13	2	70	439	4·1	2231	21·1	156
Poplar	170,217	113	799	692	—	212	12	8	361	—	2197	12·9	10	214	40	108	77	—	31	1	68	549	3·2	3225	19·0	153
South Districts.																										
St. Saviour Southwark	26,712	2	103	90	—	8	—	1	34	—	238	8·9	—	46	6	20	9	—	2	—	4	87	3·3	560	21·0	145
St. George Southwark	60,060	7	287	185	—	29	1	—	75	1	585	9·8	—	80	17	49	27	—	5	—	39	217	3·6	1384	23·1	186
Newington	118,512	15	549	325	—	86	—	6	174	—	1155	9·8	2	103	19	61	75	—	14	—	53	327	2·8	2369	20·0	158
St. Olave Southwark	12,984	—	34	28	—	6	—	—	17	—	85	6·6	—	19	4	3	7	—	—	—	3	36	2·8	268	20·7	128
Bermondsey	84,053	8	391	268	2	51	1	1	94	—	816	9·7	1	79	23	66	51	1	16	—	42	279	3·3	1734	20·7	146
Rotherhithe	40,365	7	330	150	3	25	6	2	116	—	639	15·9	—	41	15	31	13	—	2	—	32	134	3·3	764	19·0	161
Lambeth	282,574	26	1173	624	3	257	50	16	307	13	2469	8·8	1	181	64	141	109	—	46	—	134	676	2·4	4845	17·2	133
Battersea	161,558	12	834	505	—	136	4	13	299	2	1805	11·2	2	151	32	116	75	—	28	1	88	493	3·1	2573	16·0	146
Wandsworth	179,518	3	674	354	—	131	12	20	247	1	1442	8·1	—	75	20	80	55	—	21	2	64	317	1·8	2224	12·4	114
Camberwell	248,893	16	933	718	2	127	1	16	328	—	2141	8·6	2	186	46	192	137	1	22	—	101	687	2·8	4045	16·3	148
Greenwich	173,128	25	1053	578	—	164	3	17	257	—	2097	12·1	—	144	59	132	112	—	32	1	60	540	3·1	2976	17·2	138
Lewisham (excluding Penge)	79,903	7	258	153	—	46	3	9	106	—	582	7·3	—	39	12	30	35	—	14	—	24	154	1·9	1097	13·8	128
Woolwich	42,309	14	238	49	1	13	1	3	32	—	351	8·3	1	39	22	14	12	—	6	—	16	110	2·6	753	17·8	136
Lee	38,172	9	180	46	2	24	—	—	25	1	287	7·5	2	11	7	21	11	1	3	—	8	64	1·7	472	12·4	94
Plumstead	59,233	22	461	120	—	23	1	1	63	1	692	11·7	2	21	23	36	30	—	6	—	6	124	2·1	736	12·5	94
Port of London	—	7	18	5	—	13	—	—	2	—	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 535 cases of membranous croup.

† Including deaths from membranous croup.

Old Town, Poplar, St. Saviour Southwark, Bermondsey, Rotherhithe, and Greenwich sanitary areas. The Metropolitan Asylum Hospitals contained 293 patients at the beginning of 1894; 4128 new cases were admitted during the year, and 521 remained under treatment at the end of December last. Enteric fever was slightly less prevalent during the year under notice than in 1893; this disease was proportionally most prevalent in Bethnal Green, St. George-in-the-East, and Poplar. The number of enteric fever patients in the Metropolitan Asylum hospitals, which had been 103 at the beginning of 1894, was 104 at the end of December last; 675 patients were admitted during the year, against 623 and 734 in the preceding two years. Erysipelas showed the highest proportional prevalence in St. Pancras, St. Luke, Bethnal Green, Poplar, and Rotherhithe sanitary areas. The 253 notified cases of puerperal fever showed a decline of 144 from the number in the previous year; 24 belonged to Islington, 20 to Wandsworth, 17 to Greenwich, 16 to Lambeth, and 16 to Camberwell sanitary areas.

During the year under notice the deaths of 75,434 persons belonging to London were registered, equal to a rate of 17·4 per 1000, against 21·1, 20·3, and 20·9 in the preceding three years 1891-92-93. This rate was considerably lower than in any year on record, the nearest approach to so low a rate having been 18·0 in 1889. In the nine preceding years the London death-rate averaged 20·1 per 1000. In the various sanitary areas the lowest death-rates were 9·8 in Stoke Newington, 10·6 in Hampstead, 12·4 in Wandsworth and in Lee, 12·5 in Plumstead, 13·8 in Lewisham (excluding Penge), and 14·5 in St. George Hanover-square; the highest rates were 21·1 in Mile End Old Town, 21·4 in Whitechapel, 22·7 in Strand, 23·1 in St. George Southwark, 23·5 in St. Luke, 24·7 in Limehouse, and 26·4 in St. George-in-the-East. Taking the five groups of sanitary areas the rate of mortality during 1894 was equal to 16·1 per 1000 in the West, 16·2 in the North, 16·7 in the South, 20·5 in the Central, and 20·9 in the East districts. To the principal zymotic diseases 11,647 deaths were referred during the year under notice; of these, 3291 resulted from measles, 2637 from diphtheria, 2094 from whooping-cough, 1769 from diarrhœa, 961 from scarlet fever, 626 from different forms of "fever" (including 5 from typhus fever, 608 from enteric fever, and 13 from simple and ill-defined forms of fever), and 89 from small-pox. These 11,467 deaths were equal to an annual rate of 2·6 per 1000, against 2·3, 2·8, and 3·0 in the preceding three years 1891-92-93. Among the various sanitary areas the zymotic death-rates ranged from 0·9 in Stoke Newington, 1·1 in the City of London, 1·4 in St. George Hanover-square and in Hampstead, 1·7 in Lee, 1·8 in Wandsworth, and 1·9 in Lewisham, to 3·5 in Bethnal Green, 3·6 in St. George Southwark, 3·8 in Fulham, 4·1 in Mile End Old Town, 4·3 in Limehouse, and 5·0 in St. George-in-the-East. The 89 fatal cases of small-pox registered in London during 1894 were less than half the corrected average number in the preceding ten years; of these, 29 belonged to Marylebone, 8 to St. Pancras, 5 to Bethnal Green, 4 to Mile End Old Town, and 10 to Poplar sanitary areas. The 3291 deaths referred to measles were 659 above the corrected average; among the various sanitary areas this disease showed the highest proportional fatality in Fulham, Limehouse, Mile End Old Town, Poplar, St. Saviour Southwark, St. George Southwark, and St. Olave Southwark. The 961 fatal cases of scarlet fever were 140 below the corrected average; this disease was proportionally most fatal in Whitechapel, St. George-in-the-East, Limehouse, Mile End Old Town, Greenwich, and Woolwich sanitary areas. The 2637 deaths referred to diphtheria were as many as 1150 above the corrected average; among the various sanitary areas this disease showed the highest proportional fatality in Paddington, Fulham, Bethnal Green, St. George-in-the-East, Limehouse, Mile End Old Town, St. George Southwark, Bermondsey, and Camberwell sanitary areas. The 2094 fatal cases of whooping-cough were 762 below the corrected average; this disease was proportionally most fatal in St. Giles, Strand, Shoreditch, Whitechapel, and St. George-in-the-East sanitary areas. The 626 deaths referred to different forms of "fever" were 68 below the corrected average; the highest "fever" death-rates were recorded in St. James Westminster and in Strand sanitary areas. The 1769 fatal cases of diarrhœa were little more than half the corrected average; among the various sanitary areas this disease showed the highest proportional fatality in St. Luke, St. George-in-the-East, Mile End Old Town, St. George Southwark, and Rotherhithe. In conclusion, it may be stated that the mortality from measles and from diphtheria showed a marked excess in London last year, while that from each of the other principal zymotic diseases was below the average.

Infant mortality in London last year, measured by the proportion of deaths under one year of age to registered births, was equal to 143 per 1000, and was considerably below the average. The rates of infant mortality in the various sanitary areas ranged from 86 in Stoke Newington, 94 in Lee and in Plumstead, 113 in Hampstead, 114 in Wandsworth, and 115 in St. George Hanover-square, to 174 in Limehouse, 179 in Strand, 180 in Holborn, 185 in St. George-in-the-East., 186 in St. George Southwark, and 210 in St. Martin-in-the-Fields.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

SURGEON-CAPTAIN HALL has been posted to the North-Western and Surgeon-Captain Forde to the North-Eastern district on return from abroad. The following officers have arrived from India in the *Dilwara* on completion of a tour of service:—Surgeon-Majors Roche and Lewis and Surgeon-Captain Thacker. Surgeon-Major O'Sullivan has arrived in England from the Straits Settlements; Surgeon-Major Pike from Ceylon; and Surgeon-Captain Stiell from Egypt. Surgeon-Captain Kelly has embarked for Halifax. Surgeon-Captain Austin has been posted to Devonport on return from foreign service, and Surgeon-Captain Barefoot to Portsmouth, on exchange from Canada.

ARMY MEDICAL STAFF.

Surgeon-Lieutenant-Colonel Lewis Allen Irving to be Brigade-Surgeon-Lieutenant-Colonel, vice W. H. B. Clapp, M.D., retired.

INDIA AND THE INDIAN MEDICAL SERVICES.

The undermentioned officers of the Army Medical Staff, who are shortly expected to arrive in India from England, have been posted to the Bombay Command in succession to the officers named:—Surgeon-Lieutenant T. P. Jones, in succession to Surgeon-Captain R. Holyoake; Surgeon-Lieutenant E. W. Slayter, in succession to Surgeon-Major C. A. Webb; and Surgeon-Lieutenant C. O'Connor Hodgens, in succession to Surgeon-Captain S. F. Clark. Surgeon-Captain C. W. Johnson is appointed to the Collateral Charge of the Civil Surgeoncy, Meiktila, vice Surgeon-Captain T. W. Stewart, transferred. Brigade-Surgeon-Lieutenant-Colonel J. D. Gunning, A.M.S., having been permitted, as a special case, to return to England, tour expired, during the trooping season of 1894-95, will be detailed by the Principal Medical Officer H.M.'s Forces in India for duty with troops on the homeward voyage. The Queen's approval of the retirement from the Service of the undermentioned officers appears in the *London Gazette* of Jan. 18th: Surgeon-Lieutenant-Colonel Herbert Boyd, Bengal Medical Establishment; Surgeon-Lieutenant-Colonel Thomas Charles Howell Spencer, Madras Medical Establishment; Surgeon-Lieutenant-Colonel Patrick Murphy, M.D., Bombay Medical Establishment.

NAVAL MEDICAL SERVICES.

The following appointments are notified:—Surgeons and Agents F. J. Spilsbury at Anderly and Chapel, and Geoffrey Cross at Skegness.

VOLUNTEER CORPS.

Artillery: 1st Forfarshire: The undermentioned Gentlemen to be Surgeon-Lieutenants:—George Halley, M.B., and David Allan Carruthers, M.B. 1st Devonshire (Western Division, Royal Artillery): Surgeon-Captain John Tubb Thomas is appointed Captain. 1st Newcastle-on-Tyne (Western Division, Royal Artillery): Surgeon-Captain J. E. Norman resigns his commission. *Rifle:* 1st Volunteer Battalion, the Manchester Regiment: Surgeon-Lieutenant H. E. H. Matthews resigns his commission. 2nd Volunteer Battalion, the Highland Light Infantry: Surgeon-Lieutenant W. Sandeman, M.B., to be Surgeon-Captain.

VOLUNTEER MEDICAL STAFF CORPS.

The London Companies: John Robert Whait, M.B., to be Surgeon-Lieutenant.

VOLUNTEER OFFICERS' DECORATION.

The Queen has been pleased to confer the Volunteer

Officers' Decoration upon the undermentioned Officers of the Volunteer Force, who have been duly recommended for the same under the terms of the Royal Warrant, dated July 25th, 1892:—*North-Western District:* 2nd Volunteer Battalion, the Worcestershire Regiment: Surgeon and Honorary Surgeon-Major William Smith Batten, M.D., retired. *Western District:* 4th Volunteer Battalion, the Devonshire Regiment: Surgeon-Lieutenant Ezekiel Rouse. *Home District: Rifle:* 3rd Volunteer Battalion, the East Surrey Regiment: Surgeon-Major William Adolphus Fredk. Bateman. 1st Tower Hamlets Rifle Corps: Surgeon and Honorary Surgeon-Major John Hayball Paul, M.D., retired.

THE POST OF PRINCIPAL MEDICAL OFFICER OF H.M.'S FORCES IN INDIA.

We think that the Army Medical Staff is to be congratulated on the fact that the Secretary of State for India has refused to sanction the extension of service of Surgeon-Major-General Bradshaw, C.B., in the post of Principal Medical Officer of H.M.'s Forces in India beyond March next, when he will be retired. In stating this we have not, of course, a word to say against the qualifications and services of the officer in question. Our opinion is entirely based upon a matter of principle and considerations of justice to the medical department generally. The system of extension should, we think, only be very exceptionally had recourse to and in the interest of the public service only, because such extensions prejudicially affect the interests, of course, of many officers awaiting their promotion. We may fairly conclude that the Secretary of State for India does not see any exceptional grounds in India at the present time for departing from the regulations and usual procedure in such cases. Military matters are somewhat in a state of transition in India at present owing to the introduction of the new system of army organisation in that country. The changes that will ensue on Surgeon-Major-General Bradshaw's retirement will greatly depend upon who is to be the successor in his appointment. Surgeon-Major-General Walsh, the present principal medical officer of Madras, may presumably be appointed, provided he is desirous of extending his Indian service beyond five years and the authorities do not specially select some other officer for the post.

PROPOSED TESTIMONIAL TO SURGEON-GENERAL SIR JOSEPH FAYRER, K.C.S.I., Q.H.P., M.D., F.R.S.

At a meeting of the medical officers serving at Netley, held on Jan. 16th, Surgeon-Major-General Giraud, P.M.O., in the chair, it was unanimously agreed that a testimonial should be made to Sir Joseph Fayrer on his retirement as Physician to the Indian Council, President of the Indian Medical Board, and Member of the Senate of the Army Medical School. The testimonial will take the form of a portrait, to be painted by an eminent artist, and to be placed in the officers' mess at Netley, with a replica for Lady Fayrer. All members of the Army Medical Staff and Indian Medical Service are invited to subscribe, and contributions will also be received from other friends and admirers of Sir Joseph Fayrer. The subscriptions are not to exceed 10*s.* 6*d.* from each officer serving at home or in the colonies, or ten rupees from officers in India. The following officers have been elected as a committee to carry out the details of the presentation: Sir Wm. Mackinnon, K.C.B. (Director-General, A.M.D.), president; Surgeon-Major-General C. H. Giraud, A.M.S.; Deputy-Surgeon-General H. Cayley, F.R.C.S., I.M.S. (R.P.); Brigade-Surgeon-Lieutenant-Colonel J. L. Notter, M.A., M.D., A.M.S. (hon. treasurer); Brigade-Surgeon-Lieutenant-Colonel E. J. Fairland, A.M.S.; Brigade-Surgeon-Lieutenant-Colonel K. McLeod, M.D., I.M.S. (R.P.); Surgeon-Captain W. W. Webb, M.D., I.M.S. (R.P.) (hon. secretary).

AMBULANCE WORK FOR SAILORS.

We are glad to notice that a movement has been made for organising a system of first aid for sailors, who, from the circumstances in which they must necessarily be often placed, the injuries and accidents to which they are exposed, and their natural handiness and aptitude in helping sick people and one another, as well as their common sense, are well fitted to benefit by a plain practical course of instruction in this direction. Mr. A. M. Cato recently delivered an excellent lecture on this subject at Fishmongers' Hall, at the instance of the Shipmasters' Society and the St. John Ambulance Association, in which he pointed out the great need that existed among seafaring men for dealing with injuries and diseases at sea. He thought, and we agree with him, that lectures and practical instruction might be given to sailors by surgeons at sea. A brief but interesting discussion followed the lecture, in which Sir A. Rollit, M.P., Sir Herbert Perrott, chief secretary of the St. John Ambulance Association, and others took part.

AID TO THE WOUNDED IN WAR.

Brigade-Surgeon-Lieutenant-Colonel Evatt recently delivered a lecture at Toynbee Hall, in which he described the existing army organisation of aid to the wounded, and traced out the method of their removal from the actual seat of war to the nearest field hospitals, and those in the rear or at the base, until reaching their final destination at Netley or other large hospitals in this country. The lecturer described the various stages, as laid down in the regulations of our own army on the subject and as practised in warfare at the present time, and he accompanied his description by such practical details and commentary as to afford his audience a succinct and useful account of the subject. The improvement in the system of aid to the wounded in war had, he declared, been enormous since the Crimean War and the time that Miss Florence Nightingale was at Scutari, but he desired to emphasise the necessity of keeping a sufficient number of helpers on the medical staff.

THE PILGRIM TRAFFIC.

The *Times of India*, in an article on the above subject, says that the British Government, having accepted the terms of the Paris Convention of April last, has thereby bound the Government of India to a convention which has been drawn up wholly on European lines without reference to Asiatic conditions. No doubt almost all the improvements that had been already suggested by the port health officers at Bombay have been insisted on by the Paris conference, even to the establishment of an International Board at Jedda, with power to control the pilgrim traffic from all parts of the world. So far so good; but in other directions it is feared that the Convention, as it now stands, will involve difficulties of a religious character, in that the expense of a journey to Mecca will be altogether prohibitive to a large number of the poorer Mahomedans, who will consequently be unable to make the Haj—a serious matter for the numerous faithful followers of Mahomet.

THE LADY DUFFERIN ZENANA HOSPITAL AT GYA.

The ceremony of laying the entrance stone of the Zenana Hospital of the Dufferin Fund at Gya was performed by Lady Elliott on Nov. 23th of last year in the presence of a distinguished European and Indian assembly. It is expected that the building will be ready in March next for the accommodation of twenty-five in-patients, with ample space for the treatment of out-patients. At present only a one-storied building is contemplated, but should funds permit a second storey will be added.

We have previously alluded to the services which Sir Joseph Fayrer has rendered the State and Indian Government during his long and distinguished career, and we are glad to notice that Mr. Secretary Fowler has taken the occasion of his retirement to refer officially to Sir Joseph Fayrer's services in eulogistic terms.

The promotion of administrative officers to the rank of Surgeon-Major-General will henceforth be carried out under the auspices of a specially constituted Promotion Board, of which a general officer commanding a district will be president and two Surgeon-Major-Generals members. We understand that the board will sit at a very early date.

The *Times* says: "It is stated that the War Office has decided to rebuild Winchester Barracks and to re-establish the rifle depôt in that city. The work will probably occupy two years."

A new Dufferin Hospital, which has just been constructed at a cost of about Rs. 30,000, is about to be opened at Amraoti in Berar.

CATHOLIC UNIVERSITY MEDICAL SCHOOL: MEDICAL AND SCIENTIFIC SOCIETY.—The following office-bearers have been appointed for the session 1894–95: President: Mr. A. Roche. Vice-President: Dr. E. J. McWeeney. Hon. secs.: Mr. D. J. Coffey and Mr. J. A. Ringhan. Committee: Dr. A. Birmingham, Dr. O'Carroll, Mr. J. G. Gill, Mr. R. Farnan, Mr. J. Frengley, Mr. T. Donnellan, Mr. P. J. Dempsey, Mr. J. Gubbins, Mr. McArdle, Mr. J. P. McArdle, and Mr. J. M. Tighe.

Correspondence.

"Audi alteram partem."

"THE GENERAL MEDICAL COUNCIL AND THE OBSTETRICAL SOCIETY."

To the Editors of THE LANCET.

SIRS,—I am glad that Sir John Williams has drawn your attention to the astonishing resolution of the General Medical Council, dated Dec. 3rd, 1894. As an ex-president of the Obstetrical Society, and one who had much to do with the foundation of the society's examination for midwives, I had contemplated addressing you on this subject, but I refrained from doing so because I feared that in view of what seemed to me the outrageous coupling of the work of a scientific society such as the Obstetrical, even contingently, with such words as "infamous in a professional respect," I might have been tempted to write without the temper and moderation which Sir John Williams has shown. Had the General Medical Council taken the trouble to hear both sides of the question it could have easily ascertained that in instituting this examination the Obstetrical Society was acting from what, according to its lights, it considered the highest possible motives; that its examinations had been eminently successful; and that the society had only undertaken this work provisionally, and had frequently expressed itself as not only willing but anxious to discontinue it as soon as Government had legislated on the matter. Personally, I cannot see how the certificate granted can possibly be objected to; every year I issue a still more important-looking parchment to students who have achieved honourable mention in my class, which might quite as well be called a colourable imitation of a diploma. It appears pretty plain that "some enemy has done this thing," and that the Council has been thoughtlessly induced to lend a willing ear to the representation of the case put before it by the small but active section of the profession which aims at the impossible, and hopes to abolish midwives altogether. If the Council had done the Obstetrical Society the justice of pointing out in what way it wished its certificate altered there cannot be the slightest doubt but that its wishes would have received the most respectful consideration, and that the wording would have been immediately changed. Instead of doing this it fulminated, without any warning, the insulting resolution complained of. I am now told that the Council had directed some communication to be made to the society which it never received. If that is so, surely some explanation should be given of how such important documents were suppressed or failed to reach their destination.

I am, Sirs, yours truly,
W. S. PLAYFAIR.

George-street, Hanover-square, W., Jan. 19th, 1895.

"ISOLATION OF CASES OF OVARIOTOMY."

To the Editors of THE LANCET.

SIRS,—Your correspondent, Mr. Malcolm, thinks it "most undesirable" to put ovariotomy patients in a general ward and gives his reasons for thinking so. He has been accustomed to the method of isolation, and he falls into the not uncommon error of concluding that the only right and proper practice is that in which he has been trained and which he has himself adopted. The fact is that the employment of isolation as a routine method is a relic of a bygone time, when ovariotomy was treated as something altogether different from other operations, when the peritoneum was regarded with an almost superstitious dread, and when, in our ignorance, we attributed our fatalities to atmospheric contamination instead of to our own surgical uncleanliness. My experience at St. Thomas's Hospital has shown that the isolation of abdominal cases is, so far at least as regards hospital practice, as unnecessary as it is costly and inconvenient. I have at St. Thomas's Hospital only one separate ward, and that ward is single-bedded. When, owing to pressure of work, I began cautiously to try the effect of non-isolation, I did so in fear and trembling. All my prejudices then, like these of Mr. Malcolm now, were in favour of the older method. I soon found, however, that not only did no harm result from its abandonment, but that the change brought with it a distinct gain to all concerned, to the patients themselves, to the nurses, and to the hospital. I encountered none of the dangers Mr. Malcolm fears. My experience of both methods is now considerable, extending to fifteen years of the older method and five or six years of the new. I still make occasional, though less and less frequent, use of my isolation ward for exceptionally severe cases and for cases that seem to be taking a markedly unfavourable course. For obvious reasons I never willingly let a death (after operation) take place in the general ward. This disposes of the one valid objection raised by Mr. Malcolm in the discussion to which he refers. I do not blame Mr. Malcolm for adhering to a practice with which he obtains successful results; but I do ask him, as a man who has proved his ability to think for himself and has shown himself to have a mind open to conviction, to suspend his judgment as to the comparative merits of the two methods until he has had experience of both. When he has, I venture to prophesy that he will come round to my way of thinking.

I am, Sirs, yours faithfully,
Brook-street, W., Jan. 19th, 1895. CHAS. J. CULLINGWORTH.

"THE ABSENCE OF SUGAR FROM NORMAL URINE PROVED BY A NEW AND SIMPLE METHOD."

To the Editors of THE LANCET.

SIRS,—Dr. Pavy confidently asserts that "the fermentation process and the crystalline osazone production" prove that sugar is present in normal urine, and that all evidence to the contrary "goes for nothing." No physician, probably, has had larger experience of the fermentation test than Sir William Roberts, who says, "According to my experience urine containing 0·5 per cent., or two and a half grains to the ounce and under, yields no sign to the fermentation test."[1] Dr. Pavy states that he got a negative result with this test applied to normal urine until he was led to neutralise the acid urine by carbonate of soda; he then found that fermentation proceeded actively.[2] Now, one effect of adding carbonate of soda to acid urine would be to set free carbonic acid, and it would be interesting to know whether Dr. Pavy was careful to ascertain that the carbonic acid which was given off from the urine at a "suitable temperature" was not that which had been previously combined with the sodium. Dr. Pavy, as we know, by ignoring the reducing influence of kreatinine, estimates the amount of glucose in normal urine to be about 0·05 per cent., or a little over. Upon this estimate Dr. Noel Paton, Superintendent of the Research Laboratory of the Royal College of Physicians of Edinburgh, remarks:[3] "This is in opposition to the recent most careful observations of Baisch,[4] who finds that the sugar, ascertained after *separation* by its power on polarised light, amounts to, at most, 0·009 per cent., or, estimated by its reducing power, to 0·012 per cent. These results correspond closely to those of Seegen." Is it conceivable that the fermentation process would detect so small a proportion of sugar as this? There is the yet further question whether the reducing substance obtained by Baisch was not a product of the method employed for its separation from the urine.

Then, as to the phenyl-hydrazine test, Dr. Pavy assumes that the formation of osazone crystals affords conclusive evidence of sugar being present; but Dr. Noel Paton, in the paper above quoted, says: "The carbohydrates are not the only bodies which yield crystalline compounds with phenyl-hydrazine. A glance at Beilstein's 'Organic Chemistry' shows that a vast number of substances give such crystalline compounds." A consideration of the series of processes by which Dr. Pavy obtains the osazone crystals renders it highly probable that a reducing substance has—to use an expression of his own—"by a cleavage process been split off" from some constituent of the urine.

It will be seen, then, that the tests upon which Dr. Pavy relies to prove that glucose exists in normal urine are fallacious, while, on the other hand, the evidence which I have adduced proves conclusively that kreatinine, which

[1] Urinary and Renal Diseases, fourth edition, p. 210.
[2] The Physiology of the Carbohydrates, p. 131.
[3] On the Physiology of the Carbohydrates: Edinburgh Medical Journal, December, 1894.
[4] Zeitschrift für Physiologische Chemie, Band xviii.

Dr. Pavy persistently ignores, accounts for the entire reducing action of normal urine upon picric acid, and for all the reduction upon ammonio-cupric oxide, which is not due to uric acid. In short, while the absence of sugar from normal urine is established by positive and indisputable evidence the supposed indications of its presence are not to be relied upon. I am, Sirs, yours faithfully,

Savile-row, Jan. 22nd, 1895. GEORGE JOHNSON.

"INFANT NEGLECT, INSURANCE, AND MORTALITY."

To the Editors of THE LANCET.

SIRS,—In an annotation in THE LANCET of Jan. 19th you again refer to the practice of child life insurance and suggest the necessity for drastic reforms in a system of somewhat doubtful and limited advantage. Will you permit me briefly to draw the attention of your readers to a proposal in this connexion I made some time since, which was then submitted to the late Bishop of Peterborough? In the case of an infant or young child the one legitimate motive for insurance is to provide funds for its burial. This being so, what I propose is a short legislative measure prohibiting altogether infant life insurance by companies or firms, and empowering Government to enter into an agreement to inter any young child free of cost on the parents or guardians taking out a policy on its life and paying a small monthly premium at the nearest post-office. The working of such an arrangement would cost so little that all expenses could be met and decent burial secured for less than half the payments now made to insurance societies and burial clubs in respect of young children. However, economy is quite a secondary consideration; the main recommendation of my proposal is that in this way all possibility of temptation to neglect a child because it is insured for £6 would be done away with. Unfortunately, there are conditions in which such an apparently trifling sum represents a real temptation. I am, Sirs, yours truly,

FRANCIS VACHER.

Shrewsbury-road, Birkenhead, Jan. 22nd, 1895.

"THE DEBATE ON THE NATURE AND TREATMENT OF PERITONITIS AT THE OBSTETRICAL SOCIETY."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Jan. 19th Mr. Lawson Tait complains that he has been misrepresented and misunderstood in regard to his teaching on the question of the administration of purgatives after abdominal operations, and he refers to Mr. Frederick Treves as having fully expounded his views on the subject. Mr. Treves[1] quoted Mr. Tait to the following effect: "I have never said that the purgative treatment will cure peritonitis."[2] But in 1886 Mr. Tait wrote as follows: "Now we beat the peritonitis. On the slightest indication of peritonitis after an ovariotomy we give a rapidly-acting purgative, it matters not what; the patient's bowels are moved and the peritonitis disappears."[3] In 1887 I published a paper[4] in which I argued, and brought forward evidence to prove, that the symptoms referred to by Mr. Tait as "indications of peritonitis" were not necessarily due to that condition; that peritonitis was not the cause of the intestinal distension in the cases that were cured by purgatives; and consequently that peritonitis could not "disappear" in these cases. Since I published that paper I have seen no recommendation to treat peritonitis by purgatives in the writings of Mr. Tait. He has repudiated the practice and, as quoted above, he has asserted that he has never recommended this treatment. As Mr. Tait has again raised the question in THE LANCET I hope you will allow me to ask him for an explanation of the apparently contradictory quotations that I have cited from his writings. Two facts in Mr. Tait's position on this question, as restated in THE LANCET of to-day, should be carefully noted. In the first place he makes no distinction between the causes of abdominal distension in the cases under consideration—for instance, between obstruction of the intestine and septic peritonitis, which have usually well-marked differences in their clinical symptoms. Such details are to him "pathologico-metaphysical conundra," for which he does not "care a fig." But they are important in practice, for by studying these questions and getting more knowledge about them the surgeon is able to avoid such errors as Mr. Tait fell into in 1886—namely, the empirical treatment of a symptom under a misapprehension as to its cause. In the second place Mr. Tait lays little stress on the dangers of purgatives administered by the mouth during the first few days after an abdominal section. This also is an important point in practice. Mr. Tait seems to be puzzled by the fact that "after a completed abdominal section symptoms and conditions may occur harmlessly on the ninth day which would be fatal on the fourth." The explanation is that on the fourth day the inflammation due to the operation has just passed its greatest severity, and a complication occurring at that time is an added burden to the patient; whereas by the ninth day the inflammatory fever may have subsided, and the vital powers of the patient have then only to deal with the complication. Hence the later any complication appears the less likely is it to exacerbate or rekindle an acute inflammatory fever, and as a consequence it is less dangerous to the patient in proportion to the length of time that has elapsed between the operation and its onset. I have elsewhere[5] described at length how abdominal distension affects traumatic fever, but I suppose this is one of the "pathologico-physiological conundra" which have no interest for Mr. Tait. Nevertheless, this question has an intimate bearing on the practice of giving purgatives after an abdominal section. To get the patient over the first week of convalescence is of the utmost importance in abdominal surgery, and when intestinal distension occurs it is much the best practice to try to clear the bowel by enemata and to try to prevent further distension by keeping the stomach and upper intestine at rest. In this way the patient may be tided over the most dangerous period; whereas if a rapidly active purgative be given, as recommended by Mr. Tait, and if the bowels do not move, the distension is increased at a time when the patient is least able to bear the strain.

At the present day the most successful practice in abdominal surgery is directed to the prevention and removal of the causes of abdominal distension. The chief of these causes are septic peritonitis, obstruction of the bowels, and pseudo-ileus. The first is usually characterised by the well-marked facial change on which Mr. Tait lays so much stress. The other two are not so characterised. If cases in which there has been an injury to a hollow viscus and cases in which the peritoneum is left exposed are excluded, septic peritonitis may be absolutely prevented by the use of antiseptics. Ileus and pseudo-ileus should be treated after an abdominal section on the same principles as when they occur independently of an operation, and it is well known that purgation is a dangerous treatment of these conditions, and should only be resorted to with great caution, although sometimes it is brilliantly successful.

I am, Sirs, yours obediently,

Portman-street, Jan. 19th, 1895. JOHN D. MALCOLM.

[1] Lettsomian Lectures, Transactions of the Medical Society, 1894, p. 178.

[2] Brit. Med. Jour., Nov. 12th, 1892, p. 1050.

[3] Ibid., 1886, vol. i., p. 921.

[4] Transactions of the Medical and Chirurgical Society, vol. lxxi.

THE PUBLICITY OF MEDICAL EXAMINATIONS.

To the Editors of THE LANCET.

SIRS,—The General Medical Council devoted a great deal of time to visitation reports of examinations. The examinations reported on were all held at times and places well known to the Council and duly advertised to the public. They were in some instances presumably open to graduates or licentiates of the bodies. In some instances their doors were shut on those licentiates. For instance, the Dublin College of Physicians used to admit its diploma-holders to be present at its examinations, and their possible presence exercised a wholesome effect. That body now refuses to admit them, for last summer I applied in vain for admission. The pretext was that I should have been a Member of the College of Surgeons, whereas the converse pretext was not raised by the latter body. The illogical position of the Physicians would be seen at a glance. Now, Sirs, as Council visitors and inspectors cannot be in a dozen places at the same time, it would be a great protection both to the public and to the profession if the Council would make a law throwing

[5] The Physiology of Death from Traumatic Fever.

open all examinations to the presence of every member of the profession. It is an utter waste of time and of money to be inspecting the recognised examinations when there are examinations of which the Council knows nothing and of which the public knows nothing—private special examinations, backdoors by which the black sheep of the flock can readily enter into the professional fold after they have been ignominiously rejected at the front door. It is absurd to be watching the front door while a back one is left open. I entreat your attention, Sirs, to this matter. Neither you nor the Council have the faintest suspicion of the abuses which flourish under it.

I am, Sirs, yours truly,

Cashel, Jan. 7th, 1895. THOMAS LAFFAN.

THE TREATMENT OF EPILEPSY.

To the Editors of THE LANCET.

SIRS,—My attention has but recently been directed to the report in THE LANCET of Jan. 12th, of the meeting of the West London Medico-Chirurgical Society of Jan. 4th. I find I am therein represented as "referring to the benefits following the *starvation treatment*" of epilepsy (following the President in my use of this term). So far as I am concerned I am anxious to disavow the expression of such a view, my experience being that adequate nutrition is an essential to successful treatment. The view I advocated was, in truth, the utility of the substitution of an ample milk diet for one containing meat, for which, I submit, the designation of "starvation diet" is a misnomer. In my opinion advantage is derived, not only from the restriction of nitrogenous elements, which (according to some authorities) tend to the formation of unstable compounds in the nervous tissue favouring discharging lesions in the epileptic, but also from the avoidance of digestive troubles so often exciting an attack. In children especially, untrained in the Gladstonian method of mastication, who bolt imperfectly chewed masses of meat, the gain of a milk diet is great, as I had proof amongst the epileptic inmates of the Royal Albert Asylum, of which I was till lately medical superintendent. But the diet consisting of bread and milk, oatmeal porridge, farinaceous and custard puddings, with an ample supply of milk and eggs, was in no sense "starvation diet," the body weight usually increasing under the regimen. The discharging lesion of epilepsy appears, indeed, to depend upon nutrition being defective, not in quantity, but in quality; and Dr. Hughlings Jackson suggested long ago that "in the abnormal nutritive process producing unstable matter, nervous matter, the phosphorous ingredient is replaced by its chemical congener nitrogen." As regards drug treatment, borax in some cases seems to "act as a charm," but how to differentiate these cases is the difficulty. Regulated muscular exercise, especially in the open air (as in garden work), has, in my experience, been of more efficacy than drugs.

I am, Sirs, yours faithfully,

G. E. SHUTTLEWORTH, M.D.

Richmond, Surrey, Jan. 22nd, 1895.

THE LATE SURGEON-MAJOR PARKE.

To the Editors of THE LANCET.

SIRS,—As Provincial Deputy Grand Master of the Freemasons of North Connaught I would wish through your columns to inform those members of the profession who belong to the order that the Memorial Masonic Hall to be erected in Carrick-on-Shannon, the native town of the late deeply lamented Surgeon-Major Parke, has not as yet been commenced owing to the funds collected being insufficient for the purpose. I feel certain that every member of the medical profession would wish the name of one whose services both in the field and with the Emin Pasha Relief Expedition were so distinguished should be permanently kept in memory, and this being distinctively a Masonic memorial I would ask physicians and surgeons being Freemasons to contribute. Small donations will be thankfully received, and may be sent to me or to Surgeon-Lieutenant-Colonel Bradshaw, Carrick-on-Shannon. Further lists of subscribers will be published, and all subscriptions duly acknowledged.

I am, Sirs, yours faithfully,

FRANCIS E. CLARKE, M.D., M.R.C.P.I.

Boyle, Ireland, Jan. 17th, 1895.

PROPOSED ASSOCIATION OF QUALIFIED MEDICAL ASSISTANTS, JUNIOR MEDICAL OFFICERS, AND LOCUM-TENENTS.

To the Editors of THE LANCET.

SIRS,—It has occurred to me that such an association as the one proposed would be found to be very advantageous to gentlemen filling above appointments, and with this object in view I venture to state briefly some of the questions which might be settled by such a powerful organisation as this association might in time become if properly and rightly managed:—1. In connexion with this association I would suggest the formation of a special department, styled the "Medical Bureau," to take the place of the present private medical agencies, whereby members of this association might, by subscription or otherwise, possess the means at reasonable charges for obtaining suitable appointments. 2. The question of salaries paid to qualified assistants: (*a*) mode of treatment by principal or committee; (*b*) terms of engagement and dismissal; (*c*) contracts or covenants not to practise. 3. The "social" status of the qualified assistant should be fairly recognised as a legally appointed medical man. 4. Discontinuance of employment of unqualified men as medical assistants, and the results therefrom: (*a*) more openings for the qualified man; (*b*) therefore less needy men in our ranks ready to jump at any poorly paid office; (*c*) in every town where there are sufficient qualified chemists I would suggest that every practitioner should employ such to dispense his medicine; (*d*) such a plan as this would leave a field of labour open to the unqualified assistant, as his services might be used by chemists; (*e*) and in case medical men ceased to countenance or even employ unqualified men, then chemists should be compelled to give up prescribing as they do now. 5 I further think as a sound basis such an association should possess some *code of ethics*, so that each new man in the profession should become intimately acquainted with the true meaning of medical etiquette, which to my mind is the ground-work of all real proper feeling and treatment of one medical man to another. And, lastly, if these matters were carried out I venture to think in time we should gradually find our profession would take its proper and legitimate position in the world as a truly scientific calling, and not as the miserable trade which many make it.

I am, Sirs, yours truly,

T. HOWARD BROCKLEHURST, M.R.C.S. Eng., L.S.A. Lond.

Westham, Weymouth, Jan. 23rd, 1895.

*** It will be noticed that we have adopted Dr. Donkin's suggestion (vide THE LANCET, Jan. 12th, p. 120) with regard to a practical "plural of locum tenens."—ED. L.

THE ÆSCULAPIUS LODGE.

To the Editors of THE LANCET.

SIRS,—Gladly as would be welcomed amongst all good Masons any lodge bringing closer together members of the profession, I venture to suggest that the lodge in process of formation in connexion with St. Bartholomew's Hospital, as reported in THE LANCET, cannot be held to be quite on parallel lines with those of the three universities—Oxford, Cambridge, and London—or even with the Bar Lodge. The claim to such a distinction rests with the Æsculapius Lodge, now in its fourth year of existence, since we number not only members of a particular hospital, but of the whole medical profession wherever educated throughout the British Empire.—I am, Sirs, your obedient servant,

Portland-place, W., Jan. 19th, 1895. THOMAS DUTTON, Secretary, Æsculapius Lodge.

"THE SUPPORT OF HOSPITALS."

To the Editors of THE LANCET.

SIRS,—With reference to an annotation which appeared in THE LANCET of Jan. 12th, dealing with the financial condition of our hospitals and taking the case of Charing-cross as a text, I should like to make a few remarks.

It is especially of importance that those interested in the immediate working of a hospital should look most carefully into every detail of its management and see that its claims

are properly represented, not only to the inhabitants of the neighbourhood, but also to the public at large. It should not be left to a few well-known generous supporters of a hospital to make up a heavy deficit, but general pecuniary aid should at once be invoked. This reflection must arise in thinking minds whether, as hospitals at present seem to have to rely for their support mainly upon local aid, certain districts of London are not overdone with these institutions. A tradesman in Leicester-square, for instance, may, under the existing state of things, be expected to contribute to St. Thomas's, Westminster, Charing-cross, or King's College Hospitals, while a man who is run over in Parliament-street has his choice of at least three admirable hospitals within easy reach. Many poor people come to each of these hospitals from districts which hardly contribute one penny to the support of any of them, and drain the funds, which the more prosperous inhabitants of their neighbourhoods never dream of augmenting. I believe that the crowding of hospitals in one locality, due to the necessity of an accessible position for the medical schools, is a serious reason of the difficulty of supporting them, when, as is now the case, their claims are only known to the few in their immediate neighbourhood. I cannot doubt that a general hospital opened in such a district as Battersea or Camberwell would not only obtain good support, but would perform most useful work and be crowded with those forms of disease, especially surgical cases, which admit of such ready relief and are of such importance for medical study. We are all agreed that the function of hospitals as centres of medical education for students is one of the first national importance, and, while this is becoming seriously imperilled by the establishment of special hospitals in all parts of London, I do not see why local *general* hospitals should not be splendid centres of education. The special hospitals not only take away the cases most useful for medical instruction, but also attract not a small proportion of the funds which should flow to the larger institutions.

But these and kindred matters, including the chaotic state of London with regard to its charities and modes of medical education, while I am certain that they are yearly ripening for Government interference, are without the object of this letter, which is to urge upon the inhabitants of the different localities of the wealthiest city of the world the paramount and immediate necessity of rallying to the support of hospitals associated with teaching schools, now languishing for want of funds.—I am, Sirs, yours faithfully,

ASSISTANT SURGEON TO A GENERAL HOSPITAL WITH
Jan. 21st, 1895. A SCHOOL AND WITHOUT PAY WARDS.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Society of Chemical Industry.

AT the last meeting of this society a paper was read by Mr. Le Neve Foster on the Prevention of Smoke arising from Intermittent Firing in various processes of Chemical and Allied Industries. Some members of the Sanitary Association were invited to the meeting, and the vice-chairman of the Sanitary Committee of the corporation. Mr. Le Neve Foster said that in these days of foreign competition economy was essential, and the combustion of coal was the best and cheapest way of producing heat. With regular firing smoke could be avoided almost entirely, but in chemical works the firing was irregular. In most operations the apparatus had to be cooled on their completion; and before recharging "the fires had to be started *de novo* in order to heat a mass of cold brickwork and flues, entailing great difficulty in preventing the emission of black smoke." In spite of difficulties, however, much might be done by each individual manufacturer by strict supervision and careful construction of plant. This was shown in his own works, where the emission of black smoke had been reduced to an average of thirty-three seconds per hour. No doubt in some cases praiseworthy efforts had been made to minimise nuisances, both as to smoke and noxious fumes. In the main the discussion after the paper was disappointing, the speakers dwelling more on the difficulties of smoke prevention and on the terrible consequences that would follow any interference by the authorities rather than on the remedial methods suggested, in which, indeed, little interest was shown. The Chairman (Mr. Forbes Carpenter, a Government inspector of practical and scientific eminence) mentioned one method which had been found successful; but it was not alluded to by any of the speakers, nor was another, seen in practical use in Germany, which was described by another member of the society. The impression left by the discussion was that much more might be done to lessen the emission of black smoke without injury to the manufacturers, and, of course, with corresponding advantage to the rest of the community, who now, for their sakes, suffer so much in comfort, health, and pocket.

Ladies' Health Society.

The annual meeting of this society was held recently in the Lord Mayor's parlour at the town hall. The Lady Mayoress occupied the chair, and the audience, composed chiefly of ladies, was very large. The meeting, indeed, compared with similar meetings of other philanthropic societies, was, as regards audience, a great success. The more than usual interest shown may perhaps in part be due to an elaborately organised charity ball having been recently held in aid of the funds of the society. It was a most skilful and, I may surely say, praiseworthy mode of advertising the society among those able to give efficient help, and was eminently successful both socially and financially, the proceeds clearing off a considerable debt. Notwithstanding this, however, more subscriptions are wanted, for the year's work left a deficit balance of £127. Yet this is one of the most useful philanthropic agencies we have, which has for thirty years past done quiet, practical, unostentatious work that cannot be done by men. In its beginning a few ladies distributed tracts and leaflets on health topics; for the ignorance of the poor on sanitary matters had impressed itself on the late eminent surgeon, Mr. Turner, and he suggested this mode of spreading such knowledge among the poor. About the year 1879 the late Bishop Fraser drew attention to the system of visiting among the poor of Elberfeld, and a scheme for visitation was welcomed by the ladies of the society as in some measure tending to lessen one of the great evils of modern manufacturing life—the separation of rich and poor, of employers and workpeople. The latter had become massed together in the near neighbourhood of the factories and workshops, while the former, with their wives and daughters, betook themselves further and further away from the dirt and smoke of the town. This scheme led to the employment of respectable, intelligent working-class women as health visitors under the supervision of the ladies. Districts are assigned to a health visitor, who goes among the people constantly, and is immediately responsible to the lady in charge of the district, with whom she is in frequent communication. The health visitor can understand the difficulties of the poor better in many cases than the lady, and is also less liable to be imposed on. The lady visits the district at least once a week, if not more frequently, and holds a weekly mothers' meeting, at which simple addresses are given and conversations held on such subjects as personal and household cleanliness, thrift, ventilation, the prevention of infection, the care of children, the feeding, washing, and dressing of infants, cooking and nursing, the making and mending of clothing, &c. The lady visitor is often accompanied by one or two young friends, who vary the proceedings with music and singing. The health woman is always present at these meetings, and in going her rounds afterwards can afford practical help in carrying out some of the hints given at the mothers' meeting. At present there are about twenty districts in Manchester and Salford, with twenty health women and about forty ladies engaged in this work, but there is room for more. Both corporations avail themselves of the help of the society in the superintendence of some women employed by them in similar work, with satisfactory results. This movement owes much of its success to the courtesy and enthusiasm of Dr. Tatham, the late medical officer of health. The great merit of the plan is that direct personal sympathy and help in domestic and sanitary matters are brought to the homes of the people. The meeting illustrated the fact that women, even in the most staid society, are throwing off the fetters of the old conventions. The chair, as already stated, was taken by the Lady Mayoress, who spoke very well, as did also two ladies who proposed and seconded a vote of thanks to the Lord Mayor and Lady Mayoress. Each gave interesting accounts of experiences as lady visitors, which showed the great value in many ways of personal intercourse with the poor. The meeting ought to be followed by an increase of subscribers and especially of lady workers.

Paupers' Tea and Food.

The Salford guardians are contemplating a revision of the workhouse dietary, and according to statements made in the *City News* last Saturday it might be more liberal without being lavish. In a previous issue a statement was made, from information received, that common soda was used in making the tea. This was denied, but "nothing was said last week at the meeting of the guardians about the quantity of tea used for a brew. We put this at one ounce to eight pints of water, say three-farthings' worth of tea to a gallon of water, or one-tenth of a penny per pint. Sugar is added, but no milk." "This is but a sorry beverage for the aged and infirm," with which opinion many of us would agree. The bread is said to be buttered, but while there is no butter on the list of provisions, 18,000 lb. of margarine are supplied at a trifle less than sixpence a pound, or three-eighths of a penny per ounce. According to the diet table at another workhouse half an ounce of this condiment is allowed at breakfast and supper, at a cost of about three-sixteenths of a penny a meal. In the same article the daily cost of the food of a grown-up woman, calculated from the tables of the Prestwich workhouse, is three-halfpence. Breakfast and supper are alike, and the menu is five ounces of bread, a pint of tea, and half an ounce of margarine. Dinner consists of a pint and a half of soup, with five ounces of bread. The soup is said to be "very thin" and the full quantity not always given. Last year's provisions for the Salford workhouse included 2764 lb of tea. There are over 1300 inmates, so that in round numbers there would be 2 lb. per head, or three-quarters of an ounce a week. After considering the share that would fall to the men and the children, the article goes on to say: "Reckon as we like, the amount cannot be more than an ounce and a quarter a week, and for this the women have the liquid fourteen times a week, a pint each time." The conclusion this paper comes to is that in many of our workhouses the actual eating and drinking do not cost more than 10*d.* a head per week. This shows great—almost too great—regard for the ratepayers, and one is not astonished to read that the following remark is common among the old women: "We can manage somehow with the food, but the tea is a great trial to us."

Jan. 22nd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Small-pox in Edinburgh and Leith.

LAST week seven fresh cases of small-pox were reported in Edinburgh and two in Leith. Of the deaths during the week in Edinburgh two were from small-pox.

The late Dr. Robert A. Goodsir.

Dr. Robert Anstruther Goodsir died in Edinburgh in the end of last week at the age of seventy-one. He was a brother of the eminent anatomist who shed so much lustre on the University of Edinburgh in the earlier half of the century. Another brother, also a medical man, accompanied Sir John Franklin's fatal expedition to the Arctic regions in 1845; and this was the motive which led Dr. Robert Goodsir to make two expeditions to those regions. In the second expedition he went as surgeon to the ship fitted out by Lady Franklin to search for her husband. Some time after returning from the Arctic regions he went to Australia, and there led the active, restless, and exciting life of an up-country squatter. He travelled much in Asia and elsewhere, and returned to Edinburgh about ten years ago.

The Edinburgh Medico-Chirurgical Society.

It has been intimated that at the February meeting of this society Professor Fraser is to open a discussion on Cardiac Therapeutics. It is anticipated that the discussion will be an interesting one, and will be a further addition to the valuable series of discussions this society has had during the past few sessions.

Conversazione at the Royal College of Physicians of Edinburgh.

Invitations have been issued by the President of the Edinburgh Royal College of Physicians, Professor Gairdner, and Mrs. Gairdner for a conversazione to be held at the College on Feb. 8th.

The Health of Aberdeen.

Dr. Matthew Hay, in his monthly report, states that the registrar's returns for December give a total of 285 deaths in the city, equal to an annual rate of 25·49 per 1000. This high rate is mainly due to the prevalence of measles. The mean age of all persons dying during the month was 21·8 years, as against 26·2 in the preceding month and 35·6 in the corresponding month of last year. This is one of the lowest recorded in recent years, and is due to the high infant mortality from measles. The mortality rate of children under five years is nearly twice the average rate for the corresponding month in the preceding ten years. Compared with the corresponding month in the preceding ten years, the past month exhibits a total death-rate which is higher than the average by nearly 14 per cent., and is also higher than in any individual year in the decennium except 1884, when the rate, partly owing also to an outbreak of measles, was as high as 28·97. The total number of zymotic cases reported during the month was 1223, with 54 deaths, as compared with 384 cases, with 23 deaths, in the preceding month. There are no further cases of small pox; cases of scarlet fever, whooping cough, and erysipelas have declined; typhoid fever is stationary; diphtheria has increased considerably, 16 cases with 5 deaths having been reported; and measles has increased enormously, 1102 cases with 39 deaths having been reported, as against 251 cases with 5 deaths in the preceding month. The following is the return of cases of zymotic diseases notified during the past week: measles, 204; scarlet fever, 5; diphtheria, 5; typhoid fever, 1; whooping-cough, 7; erysipelas, 7: total cases, 229—being a decrease of 133 on the whole as compared with the previous week. The decrease is mainly in measles, but there is also a decrease in scarlet fever and typhoid fever. There are no cases of small-pox, typhus fever, or puerperal fever.

Public Health in Glasgow.

The most notable feature in the city's health condition just now is the slight spread of small-pox. In all, eleven cases have been reported, the entire series being traceable to contact with the four cases referred to in this column a fortnight ago. One death has occurred and some of the patients—particularly those who had not yet undergone revaccination—are dangerously ill. In connexion with this outbreak the authorities have very properly revaccinated the prisoners detained in the various local prisons, and one of the prisoners having died some time after, it was alleged that the revaccination had been the cause of death. A post-mortem examination, however, showed that the patient had died from pneumonia and pericarditis, while the arm in which the lymph had been inserted was in a perfectly healthy condition. The health authorities are thus more than ever satisfied that in revaccinating the inmates of the city prisons they are taking a necessary and efficient precaution against the spread of a loathsome disease among those of the populace who really need it most.

The Duke of Argyll.

Dr. McCall Anderson is able to report favourably of the progress of the Duke of Argyll. On Thursday the temperature was generally normal, and although indigestion remained he showed a fair appetite, while the pulse was regular and stronger.

Jan. 24th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Dublin Hospital Sunday Fund.

THE returns for the Dublin Hospital Sunday Fund collections made last November are now to hand. The total collections, donations, &c. for 1894 amounted to £4323 15*s.* 7*d.*, or an increase of some £93 as compared with 1893. Included in the amount was a sum of £55 18*s.* 5*d.*, the proceeds of a football match, and £44 18*s.* 11*d.*, the proceeds of an international lawn tennis match.

The Battle at Cork.

The battle of the clubs proceeds apace. Two other medical men came to town last week, making a total of four whose services are now at the disposal of those clubs whose members still think that they and their families should be treated for an entire year at a lower rate than 7*s.* 6*d.*

and 15s. when the member's income is under £100 and £200 respectively. Judging from the proceedings of the Queen-street Benefit Society, the clubs now consider that the four medical men they succeeded in bringing together represent a plethora of medical material, for I find one of the members of that society last Friday night solemnly warning his fellow members that the executive committee of the society delegates "had decided that three doctors were the most that the Cork societies could support." What a sad reflection—one of the four must go. For the sake of the Cork societies he despised the public opinion of the whole profession in the United Kingdom and was prepared to be ostracised by the medical men here. Yet what has been his reward for such disinterested services. The clubs simply tell him they will not have him, and he is left to his own devices to procure the fare to take him back to wherever he came from. Magnanimous and characteristic action of the Cork clubs to a member of the medical profession. The secretary of the St. Nicholas Club has resigned, and I have reason to believe that many of the members intend to follow his example. The Queen-street Society numbers some sixty or eighty members, and only twenty-seven of those took the trouble of recording a discriminating vote for one of the two competing imported medical men. Even more remarkable still, the Central Hull Society numbers some 100 members, and only seventeen of them voted last week at an election of a medical man, so little did the general body care which of the strangers obtained the appointment. A very sensible letter, too, appeared in the papers urging that a new society should be formed to embrace the many from the various societies who would be quite willing to accede to the medical men's terms. With these and other indications before me I cannot help feeling that victory is bound to be on the side of the medical men and that the end is approaching, it may be somewhat slowly, but all the same certainly and surely. I should mention that a curious development of the dispute took place last week. The medical students had previously been silent spectators of the struggle; but when they found that a gentleman who had been educated at the Cork Queen's College, and was quite recently a fellow student of theirs, had returned to the city to oppose his former teachers the students became very irate, and especially so when they saw by the newspapers that he used, in opposition to the interests of professors, hospital physicians, and surgeons, the very testimonials which those gentlemen had previously given him. Accordingly the students held a mass meeting and passed resolutions expressing sympathy with the local medical men, condemning the action of the strangers who had come to support the clubs, and declaring that any students holding intercourse with the latter should be expelled from all college clubs. This action of the students shows that there is a very strong and very commendable *esprit de corps* amongst the *alumni* of the Cork College, and some gentlemen holding medical qualifications would do better if they were guided by the same code of honour as the Cork students. After the termination of the meeting the students marched to the residences of various city medical men, cheering for the latter, and afterwards relieved their pent-up feelings by hissing and groaning outside the apartments occupied by the new club medical officers. The police were present in the interests of the latter, but the students had too much self-respect to think of doing anything calculated to require the intervention of the constables. However, the latter considered it more prudent to mount guard all night, and I have no doubt even the most junior of the newcomers finds that, at least under some circumstances, a "doctor's" life is not a happy one.

Newry Dispensary.

On Jan. 16th, at a meeting of the Newry Dispensary Committee, Mr. Henry W. Smartt was appointed medical officer for Newry No. 1 District, in the room of the late Mr. Andrew McBride, at a salary of £120 per annum as medical officer and £25 per annum as medical officer of health.

Queen's College, Belfast.

On Jan. 16th Dr. W. H. Thompson, Dunville Professor of Physiology, began his course of lectures on health, which are free to the public. There was a very large attendance, the subject being the Skin and its relation to Health. In conjunction with the Gilchrist Lectures Committee the Society for the Extension of University Teaching has arranged that Professor Letts shall deliver six lectures on Chemistry, with special reference to Belfast Industries. The first lecture, which was on Air and Water, was delivered on Jan. 17th in the Grosvenor Hall.

Belfast Hospital for Consumption and Diseases of the Chest.

At the annual meeting of the friends of this hospital, held on Jan. 16th, the honorary secretary of the medical staff, Dr. Howard Sinclair, reported that there had been 758 extern and 88 intern patients during the past year. It is satisfactory to find that the subscriptions have increased from £490 in 1893 to £605 in 1894. The endowment fund has been increased by donations of £164 11s. 8d., and the building fund has been increased by £1117 10s. 11d.—in other words, all the accounts show an increased revenue.

The Samaritan Hospital, Belfast.

The medical report submitted to the annual meeting held on Jan. 21st showed that there had been 501 extern patients during the year, while there were 106 treated in the wards. Sixty-six operations were performed, twelve of these being abdominal sections. The mortality was 3 per cent. for the year. While a large number have availed themselves of the advantages of the institution, it is regrettable to note that there has been a falling off in the list of subscriptions. This, however, may be due to the dulness of the times, as all charitable institutions have suffered. Several speakers spoke of the good done in the hospital and of the need of obtaining more subscribers.

Death of Mr. Henry, F.R.C.S. Edin., Pomeroy.

One of the oldest and most respected north of Ireland practitioners, Mr. Henry of Pomeroy, county Tyrone, died at his residence on Jan. 19th, at the advanced age of seventy-nine, and was buried on Tuesday last. Mr. Henry, who was a Fellow of the Royal College of Surgeons of Edinburgh, practised for a lengthened period at Pomeroy, county Tyrone, where he enjoyed the complete confidence of the public. He was a man respected alike for his kindness, ability, and high character, and enjoyed a large practice.

The Belfast Royal Hospital.

The working men's committee have just published their report of another year's work. The subscriptions from those engaged in various places of employment have reached the sum of £2371 4s. 1d., an increase of £210. These figures show that, since the committee was formed, the annual income to the hospital from this source has increased by over £800. What is very gratifying is that not only have the subscriptions increased, but the number of places contributing has also increased. As to the work done in the hospital, one out of every twelve of the inhabitants has received treatment in some form during the past year, and over 90 per cent. of these belong to the working classes. A pleasing feature in the report is the feeling of entire confidence expressed in the Royal Hospital.

At a recent meeting of the trustees of the South Infirmary, Cork, Dr. John Reid was elected house surgeon and Dr. R. P. Crosbie assistant house surgeon respectively.

Dr. Charles Mayne, visiting surgeon to the workhouse at Loughlinstown, Rathdown Union, county Dublin, has resigned his appointment owing to continued ill-health.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Sero-therapy as a Remedy for Syphilis.

MM. HÉRICOURT and RICHET, whose names will be familiar to the readers of THE LANCET in connexion with the sero-therapeutic treatment of tuberculosis, have been extending their experiments to other diseases. Four years ago injections of dog's serum were employed, at their instigation, in the wards of Professor Fournier against lupus and syphilis rebellious to ordinary medication. In two cases of syphilis unamenable to specific treatment dog's serum quickly transformed the general condition and paved the way for an efficacious application of ordinary specific treatment. The cases were as follows. A woman aged fifty years, to whom syphilis had been communicated by her husband twenty years previously, became, ten years after infection, neurasthenic and had osteoscopic nocturnal pains. Two years before admission into Dr. Fournier's wards she had an attack of iritis, and her walk became incoördinated

Specific treatment was found practically useless, as also was the employment of Brown-Séquard's method. Injections of inoculated dog's serum brought about in a week (three injections of 6 c.c. were made during this period) considerable improvement—the nocturnal pains and the lightning pains in the lower limbs from which she had suffered became almost inappreciable in intensity. This result would appear to indicate a method of treatment for ataxia of syphilitic origin. The other case was that of a woman aged twenty-five years, syphilitic for three years. When admitted she had numerous ulcers, reminding one of the aspect presented by cicatrising gummata. These lesions had existed for six months. Daily injections for one week were made of from 1 to 3 c.c. (22 c.c. in all) of prepared dog's serum. On the seventh day of treatment febrile urticaria developed, and vertigo was complained of. The treatment, commenced on Dec. 10th, determined in the ulcers a cicatrising action, apparent on the 14th, and recovery was on the 18th nearly complete. At the same time the woman gained flesh and lost her anæmia.

The Number of Medical Men, Dentists, &c. in Paris.

The Prefecture of Police will shortly issue a report giving the number for each arrondissement of medical, dental, and obstetric practitioners, and of pharmacists practising in this capital. It appears that on Dec. 31st, 1894 the list was as follows: Doctors in medicine, 2153; officiers de santé (now obsolete) 84; midwives (*sages-femmes*), 1090; chemists, 960; surgeon-dentists, 69. It must be understood that the 69 dentists only include those persons who have, since the promulgation of the new Medical Act in December, 1892, taken their diplomas. The bulk of the dental practitioners of Paris practise in virtue of a clause of the Act empowering such of them as had paid a patent for the year ending December, 1893, to continue their avocation. Medical practitioners are very unequally distributed amongst the twenty arrondissements. Thus, the eighth arrondissement, with a population of 91,000, possesses 385 medical men, or 1 in 235, whereas the much more populous twentieth arrondissement (population 130,000) boasts of only 29, or 1 in 4500.

The General Result of the Antitoxin Treatment of Diphtheria.

A survey of the statistics hitherto published in divers countries of the results of the application of Behring and Roux's method in the treatment of diphtheria up to the last day of December, 1894, gives a total of 2700 cases with 433 deaths, or a mortality of 16 per cent.

The Sterilisation of Drinking Water.

A very simple and efficient method of sterilisation of water is highly recommended by M. Meillère, Chemist-in-Chief of the Academy of Medicine. Four drops of the tincture of iodine of the French Codex sterilises in a few minutes one litre of spring water, all pathogenic micro-organisms being destroyed. For ordinary household use M. Meillère states that the best method of sterilising water is to prepare with it an infusion of tea, limes, or hops; but the iodine method may, he says, be advantageously employed by travellers.

Mr. Victor Horsley.

Our distinguished compatriot, Mr. Victor Horsley, was on the 16th inst. elected a foreign corresponding member of the Société de Chirurgie—a fresh proof of the esteem in which he is held by the profession in France.

Congress of Alienists.

The Sixth Congress of the Alienists and Neurologists of France and French-speaking Countries will be inaugurated at Bordeaux on Aug. 1st, under the presidency of Professor Joffroy, the successor of the late regretted Professor Benjamin Ball in the chair of Mental Pathology at the Paris Faculty. The programme will include discussions on the following subjects:—Thyroid Gland and Exophthalmic Goitre—reporter, Dr. Brissaud; the Psychoses of Old Age—reporter, Dr. Ritti; the Medico-legal Aspects of Epileptic Impulsions—reporter, Dr. Partant. Excursions, visits to asylums, and a banquet will complete the doings of the congress, which has for its secretary a former pupil of Professor Ball—viz., Dr. Régis of Bordeaux.

Jan. 22nd.

CANADA.

(FROM OUR OWN CORRESPONDENT.)

Public Health Items.

DURING the year 1894 there were, in the province of Ontario, fifteen outbreaks of small-pox, comprising thirty-five cases, six of these proving fatal. This must be considered a most satisfactory record, especially when it is remembered that in the States to the west of us it is quite prevalent. According to reports received from the local boards of health diphtheria occurred in 110 municipalities, the total number of cases being 369, with 28·1 per cent. of deaths. Since the introduction of antitoxin the Provincial Board of Health has been in the receipt of weekly supplies from the New York Biological and Vaccinal Institute, averaging 500 c.c., which have been distributed by Dr. Bryce through the province where most needed. So far some hundred cases have received the treatment; blank forms for the systematic reporting of cases have been adopted by the board with a view to their being subsequently reported upon when a large number have received treatment.

Treatment of the Insane in British Columbia.

The report of the Royal Commission appointed to investigate the Provincial Insane Asylum at New Westminster has recently been laid before the Legislature, and from the reports to hand it would seem that the treatment received by the unfortunate inmates was not in many particulars along the line of "modern treatment"; the institution is said to be equipped with implements of mechanical restraint or punishment such as handcuffs, leather mitts and muffs, steel anklets, leather anklets for women, pinion straps, and strait-jackets. Besides the use of the foregoing there was a system known as the "ducking" or "cold dip." One clause in the Commissioners' report is given in the *Mail* of Dec. 22nd as follows: "We were astounded at hearing patient after patient telling the same stories of inmates being thrashed with straps, of their being kicked, handcuffed for trifling offences, struck with the fist, ducked in cold water until nearly suffocated, of their being tortured by semi-strangulation by means of the strait-jacket, and of one man having a hand crippled for life by the prolonged use of a leather mitt." I cannot help thinking that some amount of exaggeration may have crept into the evidence due to the mental condition of the inmates, but nevertheless the fact remains that severe measures have been adopted and carried out in some cases to the point of cruelty, and I hope to hear of speedy reorganisation of the management.

Accident at Beauport Asylum.

While visiting one of the wards of this asylum recently Dr. Volee, the chief medical superintendent, was suddenly felled by a blow from a piece of iron pipe in the hands of an inmate. I believe I am correct in saying that he has since succumbed to the injury. Had it not been for the action of an attendant he would have been instantly killed.

Canadian Weather.

As evidence that we are not perpetually wrapped in snow and ice the following items from the report of the Meteorological Department for December, 1894, may be interesting. The mean temperature was 31·28° F., being 5·06° higher than the average for fifty-four years. The highest temperature (49·3°) occurred on the 16th and the lowest (6° below zero) on the 28th. On each of twenty-five days the mean temperature was above the average of that particular day and below on six days. The mean humidity was 80; the mean amount of cloud was 69, being 8 below the average; and there were 77·4 hours of direct sunshine out of a possible 277·3. Rain fell on eleven days to the depth of 1·895 in. and snow on seven days to the depth of 2·2 in.—i.e., 11·9 in. below the average. From this it will be gleaned that we have been enjoying an open winter.

THE PASTEUR-CHAMBERLAND FILTER.

THE remarkable stand which the Pasteur-Chamberland filter is making against the most severe and searching tests is a fact which in the interests of hygiene cannot be ignored. It would seem almost unnecessary, indeed, to institute further investigation, since it affords, as is well known, a reliable instrument in the bacteriological laboratory for the sterilisation of cultures, or for removing organisms from other fluids as in the preparation of antitoxin. For this purpose it is looked upon to accomplish this end as a matter of course, just as the fine paper filters which are to be found in every chemist's laboratory are relied upon to remove the finest particles suspended in fluids, or just as a given chemical reagent is entrusted to remove

completely certain metals from a solution of their salts. It may be urged, however, that in spite of the severity of the tests which may have been organised in the laboratory, yet certain conditions might still obtain in practice which might lay bare a weak spot in its armour. This is not likely in view of the care that in certain recent researches has been given to include every possible source and kind of contamination which a water may undergo and with which the filter may have to deal. The researches of Dr. Kirchner, described in detail in the *Zeitschrift für Hygiene*[1] in 1893 and more recently of Dr. H. H. Johnston, published in a thesis prepared for the D.Sc. degree of Edinburgh University on the relative efficiency of certain filters for removing micro-organisms from water, afford, we think, most conclusive evidence in this respect. The experiments of the former were either in part or entirely made with more or less dilute broth and without pressure, the liquid being thus constantly of a high nutrient capacity for organisms and containing a multiplicity of them. The latter investigation extended from October, 1893, to June, 1894, and involved over 300 examinations of filtrates, some derived from ordinary main water and some artificially contaminated. The experiments with the tube filters extended over periods of from three to six weeks of continuous filtration, and showed that the Pasteur filter retained the organisms both in the main water and in other fluids in which organisms were contained, yielding an entirely sterile filtrate during the whole of the period. These results are valuable enough by themselves, but it is still more satisfactory to find that the purifying efficiency of the Pasteur-Chamberland tube is also attested by actual practical experience. Although the Pasteur filter has been hitherto little employed in this country, it has been very extensively used in France, and the effect of its adoption on the health of large bodies of men in sufficient numbers and under a sufficient variety of circumstances to exclude the effect of coincidence has been very carefully observed. The figures, for instance, relating to the French Army, and disclosed in recent reports of the Minister of War, which were based on the use of the Pasteur filter by some hundreds of thousands of men, together with the more special figures relating to cholera and dysentery in the army of occupation of Cochin China and the Dahomey expedition, leave very little doubt that the use of the Pasteur filter in practice is a real preventive of water-borne disease. In the light of results like these there can be no excuse for reminding the profession of the existence of such a valuable instrument for good. There are, however, one or two points which have recently occurred to us in connexion with the working and construction of this filter which deserve to be more widely known and understood than it seems to us they appear to be. There is, for example, the impression, which has not unreasonably gained ground, that the material of which the filter tube is composed is so dense as to resist the passage of water through it unless considerable pressure is applied. As a matter of fact, this is not so, judging from recent experiments we have made with a domestic filter which has recently been submitted to us by Messrs. Defries and Sons of 147, Houndsditch, E.C. This filter, which was of two gallons capacity, contained three small Pasteur tubes, connected with a piece of rubber tubing outside, extending a short distance below the bottom of the filter. When the filter is filled the water gradually percolates through the walls of the tubes and finally overflows through the rubber tube, the rate of filtration depending, of course, upon the depth of fall of the delivery tube, or, in other words, upon the length of the longer limb of what really constitutes a syphon. By placing the filter high up upon a shelf, and thereby increasing the length of the outside limb considerably, the delivery of filtered water is quite rapid, but even with a short length of eighteen inches the water is delivered at a rate sufficient for all ordinary drinking purposes. In one test the flow of filtered water was found to be equal to two pints and a half per hour, which may be reckoned as equal to an output of three gallons per day. Another apparent drawback to the Pasteur filter is its incapacity to deal with the objectionable taste or smell that may chance to characterise some waters. When, however, regard is had to the fact that the Pasteur tube is simply and solely a perfect strainer, being, it should be added, of such interstitial structure as to effectually remove organisms, this is not surprising—it will not remove, that is to say, gases or solids existing in true solution, since it exerts a strictly mechanical and not a chemical effect upon the organic impurities contained in the water. Where, however, there is an unpleasant taste or smell or an objectionable material in the composition of the water to be filtered a supplementary addition is made to the Pasteur filter for the purpose of removing it. This consists in the use of some well-known oxidising material. In most waters intended for domestic drinking, however (as, for example, the London supplies), such an auxiliary is seldom required. Instinctively we avoid water that is offensive to the senses; but the Pasteur filter comes to our aid in effectually warding off more insidious dangers, which under ordinary circumstances our senses fail to perceive.

[1] Vol. xiv., p. 299, and vol. xv., p. 178 et seq.

Obituary.

KENNETH CORBET, M.D. ABERD., L.F.P.S. GLASG., L.M

DR. CORBET, of Beauly, Inverness-shire, whose death occurred on the 16th inst., not unexpectedly, for he had, we are informed, been in failing health for several months, will be greatly missed in his neighbourhood, where he was very popular and had an extensive practice. Apart from his professional attainments he was a man of much culture, well versed in Highland folk-lore and in local history and genealogy. Beauly being his native place, he was naturally a proficient in the Gaelic language and literature. His first start in life was as an apprentice to a firm of pharmaceutical chemists in Inverness. He subsequently proceeded to Glasgow, where he studied medicine at the University, and in 1854 graduated as M.D. at Aberdeen. Dr. Corbet was appointed surgeon to the local Volunteer force almost on its first formation. He was conspicuous among the early promoters of the movement, and retained his appointment until only a few years ago, retiring with the rank of lieutenant-colonel. He communicated to our columns the results of more than one interesting observation.

JOHN ABERNETHY HICKS, L.F.P.S. AND L.M. GLASG., L.S.A. LOND.

The death is announced, on Jan. 17th, at the age of fifty-eight years, at Bexhill-on-Sea, Sussex, of Mr. John Abernethy Hicks after a lingering illness. He was the second son of the late John Hicks, surgeon (a pupil of Abernethy), of Emsworth, Hants, whose family have been medical practitioners in that neighbourhood for over 150 years. Having chosen the medical profession he was apprenticed to Dr. Walter Raleigh Baxter of Emsworth, who had succeeded his father, lately deceased. In due course he entered jointly at the Westminster Hospital and the Grosvenor-place School of Medicine. Soon after the commencement of the Crimean War he obtained a commission as Acting Assistant Surgeon; he served throughout the campaign till peace was declared, and was awarded the English and Turkish medals. After that he resumed his medical studies in London, and in 1862 obtained the diploma of L.S.A. and in 1865 the L.F.P.S. and L.M. of Glasgow. He married in 1866 the only daughter of the late Charles Davenport, surgeon, of Abridge and Chigwell-row, Essex, whose practice he succeeded to and carried on for some years. He leaves a widow, one daughter, and three sons. One of the sons, Mr. Jno. Abernethy Hicks, is in the medical profession.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Külz, distinguished for his researches in physiological and pathological chemistry. He was born in 1845, and in 1880 became Professor of Physiology in the University of Marburg, where he has just died. He contributed much to our knowledge of diabetes, so that, although he was not a practising physician, his advice was sought by diabetic patients from all parts of the world. The University students found him a very strict examiner; some years ago they refused to attend his lectures, and the Minister of Public Instruction was compelled to interfere. In the early part of his medical career he was assistant to Professor Mannkopf. His special studies, both clinical and physiological, have been connected with diabetes,

and in 1879 he was appointed to the chair of Physiology in succession to Dr. Nasse. It is an open secret that he had for some time past been the private adviser of the Prussian Education Department in medical matters.—Dr. Gottstein, the celebrated Professor of Laryngology in Breslau. He was born in Lissa (Posen) in 1832 He took a leading position among the early laryngoscopists and became well known for his performance of endo-laryngeal operations. He afterwards cultivated otology and made valuable researches into the structure of the cochlea. His works included a useful text-book on Diseases of the Throat, which has been translated into several languages.—Dr. Poppelauer, a Berlin Privy Councillor, and one of the senior members of the medical profession in that capital.—We regret to see that a Reuter telegram announces the death of Dr. Loomis of New York as having occurred at that city on Wednesday last.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in the subjects indicated at a meeting of the Examiners on Thursday, Jan. 10th:—

Anatomy and Physiology:

Atal, Pundit Pralary Lal, Punjaub University, Lahore.
Caglieri, Guido Enrico, California University and University College, London.
Dhingre, Behari Lal, Punjaub University, Lahore.
Douglas, Percy Clarence, St. Mary's Hospital.
Grapel, Francis Gaspar, University College, London.
Harris, Norman MacLeod, Toronto University, Canada.
Hine, Hugh FitzNeville, Middlesex Hospital.
Lincoln, Charles Hope Septimus, Guy's Hospital.
Robertson, Richard Connon, Charing-cross Hospital.
Wilkinson, Arthur Wilfred, St. Bartholomew's Hospital.

Anatomy only:

Andrews, Cecil Edward, London Hospital.
Hay-Coghlan, William Killeagh, St. Mary's Hospital.
Lewis, Lionel Hugh, Guy's Hospital and University College, Cardiff.
Pattison, Albert John, London Hospital.
Robinson, John Hugh Ripon, London Hospital.
Miles, William, St. Mary's Hospital and University College, Cardiff.
Miller, George Valentine, University College, London.

Physiology only:

Amsden, Walter, St. Bartholomew's Hospital.
Foster, George Muir, University College, London.
Gibson, Charles Walter, Guy's Hospital.
Gruchy, Edgar John, London Hospital.
Henchley, Albert Richard, Middlesex Hospital and Mr. Cooke's School of Anatomy and Physiology.
St. John, Winstan St. Andrew, St. Mary's Hospital.
Waller, Harry Mortlock, St. Bartholomew's Hospital.

Fifteen gentlemen were referred in both subjects, six in anatomy only, and seven in physiology only.

The following gentlemen passed the First Examination of the Board, in the subjects indicated, at the quarterly meeting of the Examiners, under the five years' regulations:—

Part I., Chemistry and Physics:

Alltree, George William, King's College, London.
Bayly, Francis Stephen Goodenough, St. Thomas's Hospital.
Bent, Vincent Thomas Clare, Guy's Hospital.
Bingham, Frank Miller, St. Thomas's Hospital.
Blackstone, Charles Edgar, Middlesex Hospital.
Boyle, William Francis, Charing-cross Hospital.
Browne, Edward Wemyss, St. Thomas's Hospital.
Bullen, Edward Harry, St. Mary's Hospital.
Churton, John Gaitzkell, University College, Liverpool.
Cooper, Walter Edward, University College, London.
Corbett, Sidney D'Alton, St. George's Hospital.
Cox, William Alfred Clayton, St. Mary's Hospital.
Crawford, Vincent James, Guy's Hospital.
Crawley, Herbert Edward, Oxford University.
Davies, Walter C. C. Cornwalles, St. Mary's Hospital.
De Coteau, Joseph Taph., Guy's Hospital.
De Freitas, Quirino Bonifacio, King's College, London.
Drake-Brockman, Ralph Evelyn, St. George's Hospital.
Driver, Henry Lloyd, St. George's Hospital.
Eastment, Gerald Meade, Middlesex Hospital.
Evans, Arthur Robert, University College, Cardiff.
Faulkner, Erasmus Oakes, St. Mary's Hospital.
Fawley, Tom Bower, Yorkshire College, Leeds.
Featherstone, Frank Reginald, Guy's Hospital.
Glaze, Thomas Horace, Mason College, Birmingham.
Gowing, Benjamin, Yorkshire College, Leeds, and Firth College, Sheffield.
Grindle, Cyril Page, St. Mary's Hospital.
Hand, Frederick Harold, St. George's Hospital.
Horton, Horatio Nelson, Middlesex Hospital.
Hudson, Edmund, Owens College, Manchester.
Hughes, Norman Alexander Aylmer, Yorkshire College, Leeds.
Illius, John Warwick, St. Bartholomew's Hospital.
Langdon, Harold Steele, Middlesex Hospital.
Lees, Charlie, Charing-cross Hospital.
Macintosh, Archibald Malcolm, St. Mary's Hospital.
Merry, Edward, London Hospital.
Michell, Ralph, Guy's Hospital.
Morley, Arthur Solomon, St. George's Hospital.
Moss-Blundell, Cuthbert Blundell, St. Thomas's Hospital.
Newton, Courtenay Howard, St. Thomas's Hospital.
Newton, Reginald Goldie, Oxford University.
Oxley, James Charles Stewart, St. Thomas's Hospital.
Parker, Herbert Alban, St. Thomas's Hospital.
Patch, Burnet Graham, St. Thomas's Hospital.
Pern, Norman, St. Thomas's Hospital.
Phillips, Norman Routh, London Hospital.
Pritchard, Sydney Clifford, King's College, London.
Rodil, Juan Jose, Guy's Hospital.
Row, Charles Martin, University College, London.
Row, Edward Reginald, Guy's Hospital.
Rutherford, William Harper, St. Thomas's Hospital.
Smith, Alan Ayre, Guy's Hospital.
Smith, Hugh, Mason College, Birmingham.
Sturdy, Harry Carlile, Guy's Hospital.
Tatchell, Percy, St. Bartholomew's Hospital.
Tredgold, Alfred Frank, London Hospital.
Vaughan, Arthur Llewellyn, St. Bartholomew's Hospital.
Vosper, Percy, King's College, London.
Weston, Alfred Fullam, St. George's Hospital.
William, Norman, Otago University and Guy's Hospital.

Part II., Practical Pharmacy:

Brown, Alexander, King's College, London.
Horsbrugh, Charles Bethune, University College, Bristol.
Humby, Harry Robinson, St. Bartholomew's Hospital.
McMullen, William Halliburton, King's College, London.
Mason, Samuel, St. Bartholomew's Hospital.
Page, Shirley, Mason College, Birmingham.
Reid, Allen George, London Hospital.
Sass, Frederick Joseph Wilfred, St. Mary's Hospital.
Simpson, Graham Scales, Guy's Hospital.
Sprawson, Cuthbert Allan, King's College, London.
Storrs, Reginald, St. Bartholomew's Hospital.
Tatchell, Percy, St. Bartholomew's Hospital.
Tredgold, Alfred Frank, London Hospital.
Unsworth, Noel, St. Thomas's Hospital.
Whitaker, Leonard Edgar, St. Bartholomew's Hospital.

Part III., Elementary Biology:

Agar, William Harold, University College, London.
Agate, Henry St. Arnaud, St. Mary's Hospital.
Ainscow, James, Owens College, Manchester.
Auley, Frederick Eustace, Charing-cross Hospital.
Austin, Elfred Chalmers, St. Mary's Hospital.
Barlet, Jehan Meredith, St. Mary's Hospital.
Batchelor, Henry Charles, Guy's Hospital.
Beasley, Joseph Howard, Mason College, Birmingham.
Brind, Alfred Michael, Mason College, Birmingham.
Bullen, Edward, St. Mary's Hospital.
Carr, Henry Brookes, Guy's Hospital.
Chapman, Donald Poyntz, Charing-cross Hospital.
Coleman, Frank, Charing-cross Hospital.
Cox, William Alfred Clayton, St. Mary's Hospital and School of Science, Cheltenham.
Dalzell, Arthur Montgomerie, St. Bartholomew's Hospital.
Davies, Frank Aaron, Mason College, Birmingham.
Dewick, George, St. Thomas's Hospital.
Doubble, Meredith Sedgwick, Charing-cross Hospital.
Driscoll, Louis Cornelius, Charing-cross Hospital.
Fedden, Walter Fedde, St. Paul's School, London.
Garne, Sydney William, Charing-cross Hospital.
Goodwin, William Richard Power, St. Mary's Hospital.
Gribbell, William Ernest, St. Mary's Hospital.
Hipwell, Harry, Middlesex Hospital.
Humphreys, Jack Edmund, Charing-cross Hospital.
Jones, Ernest Samuel, University College, Cardiff.
Kilpatrick, James Armstroud, University College, Cardiff.
Kirkconnel, Edward Birchall, Owens College, Manchester.
Kirkman, Albert Henry Beaumont, Guy's Hospital.
Lamborn, William Alfred, Middlesex Hospital.
Lees, Charles, Charing-cross Hospital.
Lister-Kaye, Allan, Guy's Hospital.
Lloyd, Hugh Edward Drummond, St. Bartholomew's Hospital.
McIntyre, Daniel, Owens College, Manchester.
Martin, Malcolm Murcott, St. Bartholomew's Hospital.
Maynard, George Darell, St. Mary's Hospital.
Newport, Alexander Charles, Charing-cross Hospital.
Passmore, William Henry, Charing-cross Hospital.
Pinches, Henry Irving, St. Paul's School, London.
Rhodes, Thomas Basil, Mason College, Birmingham.
Roche, Ivan Joseph, Charing-cross Hospital.
Rockwood, David Pratt, University College, London.
Row, Charles Martin, University College, London.
Scott, Henry Martin, Charing-cross Hospital.
Simpson, John Edgar, University College, London.
Smith, Percy Nelson, St. Mary's Hospital.
Smith, Sydney Joseph, Charing-cross Hospital.
Southan, Percy, Mason College, Birmingham.
Speirs, George Benjamin Armes, St. Mary's Hospital.
Sprague, Francis Henry, St. Mary's Hospital.
Stone, Gerald William, St. Bartholomew's Hospital.
Tayler, Henry Christopher, St. Mary's Hospital.
Thompson, William Atkin, Owens College, Manchester.
Tonge, George Preston, St. Paul's School, London.
Vawdrey, Percy Llewellyn, St. Bartholomew's Hospital.
Von Rosen, Alfred Dittlof Benedictus, St. Mary's Hospital.
Wagstaff, Charles Bertrand, Charing-cross Hospital.
Wells, Hardy Vesey, St. Mary's Hospital.
Westlake, Bertrand Beaumont, Guy's Hospital.

Weston, Alfred Fullam, St. George's Hospital.
Whitaker, Leonard Edgar, St. Bartholomew's Hospital.
Wilshaw, Thomas Ratcliffe, Mason College, Birmingham.
Woodcock, Henry Chadwick, St. Mary's Hospital.

Part IV., Elementary Anatomy:

Alderson, Francis Bellairs, Firth College, Sheffield.
Barnes, Ernest Charles, London Hospital.
Bathurst, William Henry Isaac, King's College, London.
Bradley, John Bird, Mason College, Birmingham.
Bridger, James Frederick Edmund, St. Mary's Hospital.
Clogg, Herbert Sherwell, University College, Cardiff.
Cocke, Robert Sturgeon, King's College, London.
Davies, Frank Aaron, Mason College, Birmingham.
Dowsett, Ernest Blair, Guy's Hospital.
Francis, William Varé Chalmers, Westminster Hospital.
Garne, Sydney William, Charing-cross Hospital.
Gowing, Benjamin, Firth College, Sheffield, and Yorkshire College, Leeds.
Hamilton, William Gairn, St. Bartholomew's Hospital.
Herklots, Gerard Andreas, University College, London.
Hogan, Roger Joseph, London Hospital.
Hope, Walter Bayard, Guy's Hospital.
Humphreys, Jack Edmund, Charing-cross Hospital.
Jones, Ernest Samuel, University College, Cardiff.
Jones, John, University College, London, and Mr. Cooke's School of Anatomy and Physiology.
Joy, Norman Humbert, St. Bartholomew's Hospital.
Kelly, Thomas Thelwell, Guy's Hospital.
McClintock, John, King's College, London.
McIntyre, Daniel, Owens College, Manchester.
McLachlan, Arthur Ronald, Guy's Hospital.
Martin, Malcolm Murcott, St. Bartholomew's Hospital.
Maynard, George Darell, St. Mary's Hospital.
Moggridge, Charles Francis Blagney, St. Thomas's Hospital.
Oliver, Arthur Cardell, University College, Cardiff.
Phillips, Norman Routh, London Hospital.
Reid, Allan George, London Hospital.
Ricketts, Arthur, University College, London.
Ruttledge, William Edward, University College, London.
Scott, Aleck Lauriston, St. Bartholomew's Hospital.
Smith, Sydney Joseph, Charing-cross Hospital.
Smith, Thomas William, Charing-cross Hospital.
Stone, Gerald William, St. Bartholomew's Hospital.
Stuart, Hackworth, University College, London.
Thomas, Alfred Messer, Guy's Hospital and Durham University.
Thomas, David Jones, London Hospital.
Unsworth, Noel, St. Thomas's Hospital.
Unwin, William Howard, Charing-cross Hospital.
Walker, John Frederick, London Hospital.
Wagstaff, Charles Bertrand, Charing-cross Hospital.
Wilshaw, Thomas Ratcliffe, Mason College, Birmingham.
Yoxall, Edward, Mason College, Birmingham.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed in the under-mentioned subjects:—

Surgery.—R. B. Allen, St. Mary's Hospital; C. M. Beadnell, Guy's Hospital; W. S. Dibbs, Leeds; A. Douglas, Birmingham; R. H. Hayes, Guy's Hospital; P. S. Kesteven, St. Bartholomew's Hospital; W. A. Montgomery, St. Thomas's Hospital; A. T. Petyt, Leeds; E. P. Staples, St. Mary's Hospital; T. Stevens, Charing-cross Hospital; C. S. Taylor, Manchester; and J. M. Troup, King's College.

Medicine, Forensic Medicine, and Midwifery.—H. W. Clarke, St. Mary's Hospital; T. S. Collin, Manchester; L. C. Dillon, King's College; W. MacLellan, St. Mary's Hospital; G. P. U. Prior, King's College; and J. H. Whitaker, Belfast.

Medicine and Forensic Medicine.—O. W. Gange, University College.

Medicine and Midwifery.—A. H. Trevor, Guy's Hospital.

Medicine.—M. T. Archdall, Charing-cross Hospital; and T. Watts, Manchester.

Forensic Medicine.—T. Morris, Liverpool.

Midwifery.—W. J. H. Dawson, St. Thomas's Hospital; and P. S. Kesteven, St. Bartholomew's Hospital.

To Messrs. Allen, Archdall, Clarke, Dillon, Douglas, Hayes, MacLellan, Morris, Prior, and Stevens was granted the diploma of the society.

FOREIGN UNIVERSITY INTELLIGENCE.—*Amsterdam:* Dr. M. Straub has been appointed Extraordinary Professor of Ophthalmology.—*Berlin:* Dr. O. Heubner has been appointed to the newly established Professorship of Children's Diseases.—*Constantinople (Military Medical School):* Dr. Rifat Bey has been appointed Professor of Pathological Anatomy in succession to the late Dr. Ohanes Bey.—*Leipsic:* Dr. Friedrich has been recognised as *privat-docent* in Surgery.—*New York (Post-graduate School):* Dr. R. Guiterns has been appointed Professor of Operative Surgery.—*St. Petersburg (Military Medico-Chirurgical Academy):* Dr. J. A. Praxin has been recognised as *privat-docent* in Surgery.

A SESSIONAL MEETING of the Sanitary Institute will be held at the Parkes Museum on Wednesday, Feb. 13th, at 8 P.M., when a discussion will be opened by Dr. George Vivian Poore, F.R.C.P., on Dry Methods of Sanitation. The chair will be taken by Sir Thomas Crawford, K.C.B.

OFFICIAL RECEPTION BY THE SHERIFF OF YORK.—On the 16th inst. the Sheriff of the city of York (Dr. Tempest Anderson, J.P.) held an official reception in the York Exhibition Buildings. About 2000 guests attended and spent a most enjoyable evening. Dr. Anderson delivered an elaborate and important address on Man and his Habitation, illustrated by a series of lantern slides showing the development of human habitations from cave dwellings. Many objects of great scientific interest were on view, including a phonograph and a double pendulum apparatus for drawing harmonic curves.

THE board of governors of the Suffolk General Hospital at Bury St. Edmunds have regretfully accepted the resignation of Dr. Robert Macnab, the senior medical officer of the hospital, who has been on the medical staff of the institution for nearly thirty years. At a special meeting of the governors it was reported that Dr. Macnab could not be induced to reconsider his decision, and the resignation was, therefore, formally accepted. Many speakers made most complimentary references to the past services of Dr. Macnab, who was unanimously appointed consulting medical officer.

WE have received the sixth annual report (1894) of the Scottish Branch of Queen Victoria's Jubilee Institute for Nurses. The object of this association is to provide trained nurses for the sick poor in their own homes. Her Majesty the Queen has been pleased to appoint H.R.H. the Princess Louise, Marchioness of Lorne, President of the branch for three years from Jan. 1st, 1894. Seventy-eight of these nurses are at work in different parts of Scotland, both urban and rural. Eight new local associations have been formed and have been affiliated to the institute. The ordinary expenditure has exceeded the receipts by £462, and the deficiency has been met out of a reserve fund.

PRESENTATIONS.—Mr. G. E. Helme, M.B., C.M. Edin., on the occasion of his resigning the position of house surgeon at the district hospital, West Bromwich, was the recipient from past and present in-patients of that institution of a handsome case containing a set of surgical instruments in testimony of their respect and esteem.—Mr. W. J. C. Keats, L.R.C.P. Lond., M.R.C.S., has been presented with a cake basket by the nurses of the Greenwich Union Workhouse "as a token of their appreciation of the benefits derived by them from attending a course of his lectures at the infirmary."—Mr. M. R. Rich, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., of Crowland, Lincolnshire, has been presented with the Royal Humane Society's medal for saving a lad from drowning in November last.

INFIRMARY NURSING.—A meeting convened by the Matrons' Council, and held at the rooms of the Medical Society of London on the 17th inst., was largely attended by hospital and infirmary matrons, by medical men, and by Poor-law guardians. The chair was taking by Dr. Bedford Fenwick, and a paper was read by Miss Mollett, matron of the South Hants County Hospital and late matron of the Chelsea Infirmary, upon the Conditions of Nursing under the Poor-law. The lecturer drew special attention to the importance of delimiting and defining the respective duties of the medical superintendent and the matron of the workhouse infirmaries, showing that many of the disputes and nearly all the friction now so frequent are due to the present system.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Lectures will be delivered at the College during the winter session by Mr. W. G. Spencer, F.R.C.S. (Arris and Gale Lecturer), on "The Central Nervous Mechanism of Respiration," on the 18th, 20th and 22nd of February; Professor C. B. Lockwood, on "Traumatic Infection," on the 25th and 27th of February and the 1st of March; Professor Charles Stewart, on "A Revision of the Endoskeleton in the Physiological Series in the Museum of the College," on the 11th, 13th, 15th, 18th, 20th and 22nd of March; Professor Joseph Griffiths, on "The Testis," on the 25th, 27th and 29th of March; and Mr. J. H. Targett, F.R.C.S. (Erasmus Wilson Lecturer), on "Recent Additions to the Museum of the College," on the 1st, 3rd and 5th of April.

THE Musical Society of Middlesex Hospital gave their last periodical concert in the board room of the hospital on Thursday, Jan. 24th, at 5.30 P.M.

THE Congress of the British Institute of Public Health will be held this year in Hull, upon the invitation of the Mayor, the Sheriffs, and Town Councillors of that borough.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

BAILEY, W. H., M.B. Lond., M.R.C.S., D.P.H., has been appointed Medical Officer for the East Dulwich Sanitary District of the parish of St. Giles, Camberwell.

BARR, JAMES, M.D. Glasg., L.R.C.S., L.M. Edin., has been reappointed Physician to the Liverpool Northern Hospital.

BARROW, V. E., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Sampford Peverell Sanitary District of the Tiverton Union.

BATTEN, FREDERICK E., M.D. Cantab., M.R.C.P. Lond., has been appointed Assistant Physician to the Hospital for Sick Children, Great Ormond-street.

BROOKSBANK, H. J., B.A. Cantab., has been appointed House Surgeon to the Victoria Hospital for Children.

CAMPBELL, W. M., M.D. Edin., M.R.C.S. Eng., has been reappointed Consulting Surgeon to the Liverpool Northern Hospital.

COLMER, P. A., L.R.C.P. Lond., M.R.C.S., has been reappointed Honorary Surgeon to the Yeovil District Hospital and Dispensary.

DICKINSON, E. H., M.D. Edin., F.R.C.P. Lond., L.R.C.P., L.R.C.S. Edin., has been reappointed Physician to the Liverpool Northern Hospital.

ELAM, GEORGE, M.D. Durh., B.S., M.R.C.S., L.R.C.P., has been appointed Honorary Surgeon to the Invalid Asylum, Stoke Newington.

HARRISSON, D., F.R.C.S. Edin., M.R.C.P., L.M. Irel., M.R.C.S. Eng., has been reappointed Honorary Surgeon to the Liverpool Northern Hospital.

HUNT, WM. A., L.R.C.P. Lond., M.R.C.S., has been reappointed Honorary Dental Surgeon to the Yeovil District Hospital.

HUNTER, W. L., M.D., B.Ch. Dubl., D.P.H. Eng., has been appointed Medical Officer of Health for the Pudsey District Council.

JACOB, E. L., M.R.C.S., has been appointed Medical Officer to the Leatherhead Urban Council.

JAMES, C. A., M.R.C.S., L.R.C.P. Lond., D.P.H., has been appointed Consulting Surgeon to the Invalid Asylum, Stoke Newington.

LAWFORD, J. B., F.R.C.S. Eng., has been appointed Ophthalmic Surgeon to St. Thomas's Hospital, London.

MAHOOD, A. E., M.B., M.Ch. Irel., F.R.C.S. Eng., has been reappointed Medical Officer for the Northam Sanitary District of the Bideford Union.

MANIFOLD, W. H., M.R.C.S., has been reappointed Consulting Surgeon to the Liverpool Northern Hospital.

MARSH, C. J., L.R.C.P., L.M. Edin., M.R.C.S., has been reappointed Honorary Surgeon to the Yeovil District Hospital and Dispensary.

MATTHEWS, WM., L.D.S.R.C.S. Eng., has been reappointed Dental Surgeon to the Liverpool Northern Hospital.

MCMATH, WM., M.B., B.Ch. Irel., has been appointed Medical Officer to the Queen-street Friendly Benefit Society, Cork.

MONTGOMERIE, H. M., M.D., C.M. Edin., has been reappointed Physician to the West Cornwall Infirmary and Dispensary.

MONTGOMERY, J. B., M.D. Glasg., F.R.C.P. Lond., L.R.C.S. Edin., M.R.C.S., has been reappointed Consulting Physician to the West Cornwall Infirmary and Dispensary.

OLIPHANT, FRANK, M.B. Edin., has been appointed Junior House Surgeon to the Chesterfield Hospital.

PEARCE, A. CHANING, M.B. Lond., has been appointed House Physician to the Victoria Hospital for Children.

PUZEY, C., F.R.C.S., L.M., L.R.C.P. Lond., has been reappointed Honorary Surgeon to the Liverpool Northern Hospital.

SYMONS, J., M.R.C.S., has been reappointed Surgeon to the West Cornwall Infirmary and Dispensary.

WALKER, G. E., F.R.C.S. Eng., M., has been reappointed Consulting Ophthalmic Surgeon to the Liverpool Northern Hospital.

WALKER, H. S., F.R.C.S., has been appointed Lecturer on Ophthalmology and Otology at the Yorkshire College, Leeds.

WILSON, A. H., L.R.C.P. Lond., M.R.C.S., has been reappointed Honorary Surgeon to the Liverpool Northern Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

CANCER HOSPITAL (Free), Fulham-road, S.W.—House Surgeon for six months. Salary at the rate of £50 per annum, with board and residence.

CENTRAL LONDON OPHTHALMIC HOSPITAL, 238A, Gray's-inn-road, W.C.—House Surgeon. Rooms, coals, and light provided.

DEWSBURY AND DISTRICT INFIRMARY, Dewsbury.—House Surgeon. Salary £80, with board and residence.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer, for one year. Salary £80 per annum, with board and lodging.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, London, W.—Clinical Assistants. Also Registrar and Pathologist for six months. An honorarium at the rate of 25 guineas a year.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Shoreditch, N.E.—Junior House Physician for six months. Board and lodging (including washing) provided.

ROYAL SOUTH LONDON DISPENSARY.—Surgeon in Ordinary to visit patients at their own homes in the Waterloo District. Honorarium £20 per annum. Applications at the Dispensary, St. George's-cross, S.E.

SALFORD ROYAL HOSPITAL.—House Surgeon. Salary £100 per annum, with board and residence.

SALOP INFIRMARY, Shrewsbury.—House Surgeon. Salary £100 per annum, with board and residence.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—House Surgeon for two years. Salary £100 per annum, with board, lodging and washing.

TAUNTON AND SOMERSET HOSPITAL, Taunton.—Honorary Surgeon.

Births, Marriages, and Deaths.

BIRTHS.

DUFF.—On Jan. 22th, at Tyrwhitt-road, St. John's, S.E., the wife of C. E. Duff, M.B., of a son.

ELAM.—On Jan. 17th, at Manor-road, Stoke Newington, N., the wife of George Elam, M.D., of a son.

FLETCHER.—On Jan. 22th, at Harley-street, the wife of H. Morley Fletcher, M.D., of a daughter.

GILBERTSON.—On Jan. 13th, at Hitchin, the wife of James Henry Gilbertson, L.R.C.P. Lond., M.R.C.S., of a daughter.

GREEN.—On Jan. 14th, at Ruthurglen, Woodside, the wife of E. F. S. Green, M.D., of a son.

HAMLEN-WILLIAMS.—On Jan. 20th, at Belgrave-mansions, Grosvenor-gardens, S.W., the wife of T. R. Hamlen-Williams, M.R.C.S., L.R.C.P., Fairfield, Pontypridd, Glam., of a daughter.

MORTON-WILSON.—On Jan. 18th, at Carlton-villas, Chichele-road, Cricklewood, N.W., the wife of G. Morton-Wilson, M.B., of a daughter.

SLAUGHTER.—On Jan. 18th, at Ashburton-road, Southsea, the wife of Surgeon-Lieutenant-Colonel W. B. Slaughter, A.M.S., of a son.

SUMPTER.—On Jan. 8th, at 2, Harley-place, W., the wife of W. J. Ernely Sumpter, M.R.C.S. Eng., and L.R.C.P. Lond., &c., of Sheringham, Norfolk, of a son.

SWAYNE.—On Jan. 16th, at Leicester-place, St. Paul's-road, Clifton, the wife of Walter C. Swayne, M.D., of a daughter.

SYLVESTER.—On Jan. 18th, at Trowbridge, Wiltshire, the wife of Kirwan F. Sylvester, Surgeon, of a daughter.

WARNER.—On Jan. 17th, at Brechin-place, S.W., the wife of F. Ashton Warner, F.R.C.S., of a son.

MARRIAGES.

CLARKE—ROBINSON.—On Jan. 7th, at Holy Trinity Church, Crockham-hill, Fielding Clarke, M.R.C.S. Eng., L.R.C.P. Lond., L.S.A. Lond., to Janie, second daughter of Joseph Robinson, Esq., of Lewins, Crockham-hill, Kent.

DUGGAN—MAUNDE.—On Jan. 14th, at Chetwynd Church, Newport, Salop, Surgeon-Captain C. W. Duggan, M.B., Army Medical Staff, to Crystal Maunde, youngest daughter of W. H. Maunde, Esq., of Merevale, Newport, Salop.

WARD—ROLFE.—On Jan. 9th, 1895, at Great Amwell, George Smith Ward, L.R.C.P., Stevenage, to Fanny Stock Rolfe, of Leigh Court, Amwell.

DEATHS.

FITCH.—On Jan. 12th, at Alma-square, Scarborough, Samuel Edward Fitch, M.D., Clerk in Holy Orders, aged 84.

GOODSIR.—On Jan. 17th, at 11, Danube-street, Edinburgh, Robert Anstruther Goodsir, M.D., aged 71 years.

HICKS.—On Jan. 17th, 1895, at Oakhurst, Bexhill-on-Sea, in his 58th year, John Abernethy Hicks, L.F.P.S. and L.M. Glasg., L.S.A. Lond., son of the late John Hicks, surgeon of Emsworth, Hants, and son-in-law of the late Charles Davenport, surgeon of Abridge and Chigwell Row, Essex. Interred at Epping, Essex.

JACKSON.—On Jan. 16th, at Nice, Deputy-Surgeon-General C. J. J. Jackson, H.M. Indian Medical Service (retired), aged 64.

WHISHAW.—On Jan. 20th, at Mentone, Alpes Maritimes, Brigade-Surgeon J. C. Whishaw, Bengal Army (retired), aged 62.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan. 24th, 1895.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp Shade	Min Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 18	29·69	W.	38	35	67	47	36	0·02	Cloudy
" 19	29·79	S.	44	43	57	47	37		Overcast
" 20	29·53	S.W.	49	48	69	53	43	0·55	Cloudy
" 21	29·53	N.E.	41	40	47	42	40	0·02	Raining
" 22	29·90	W.N.W.	35	31	40	40	32	...	Overcast
" 23	29·51	W.	40	39	67	40	35	0·35	Overcast
" 24	29·44	N.W.	37	35	46	42	30	0·14	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynecological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Gt. Northern Central (2.30 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY.—MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Percy Kidd: A successful case of Paracentesis Pericardii.—Dr. E. Cautley: The Treatment of Empyemata in Children, based on an Analysis of Eighty-six Cases.

THURSDAY.—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Card Specimens:—Messrs. Hodge and Ridley: Intraocular Melanotic Sarcoma with Peculiar Characteristics.—Mr. Lawford: Unusual Arrangement of the Retinal Vessels.—Dr. Argyll Robertson: Filaria Loa.—Mr. Marcus Gunn: (1) Peculiar Lenticular Changes following Old Injury of Eyeball; (2) Prolonged Hyperæmic Congestion of Optic Discs closely simulating Papillitis. 8.30 P.M. Papers:—M. Darier: Subconjunctival Injections of Mercury.—Mr. Jessop: Two cases of Diphtheritic Ophthalmia treated by Klein's Antitoxin.—Mr. Wray: Removal of the Lens for High Myopia with a case of −25 D.—Dr. G. Ogilvie: A case of Double Optic Atrophy with Peculiar Visual Fields.—Dr. G. Mackay: Eyesight and the Public Services.

FRIDAY.—WEST KENT MEDICO-CHIRURGICAL SOCIETY (Miller Hospital, Greenwich).—8.15 P.M. Dr. Morgan Dockrell: Cutaneous Syphilis.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8.30 P.M. Mr. C. Bucknell: A Case of Cowpox in Man.—Mr. Keetley: On Intestinal Affections requiring Surgical Treatment. Card Specimens by Messrs. Bidwell and Keetley and Dr. Abraham.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY.—SOCIETY OF ARTS.—8 P.M. Prof. Silvanus P. Thompson: The Arc Light. (Cantor Lecture.)

TUESDAY.—ROYAL INSTITUTION.—3 P.M. Prof. Charles Stewart: The Internal Framework of Plants and Animals. (III.)
CENTRAL LONDON THROAT AND EAR HOSPITAL.—4.30 P.M. Dr. Lennox Browne: The Antitoxin Treatment.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Gowers.
ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—5 P.M. Dr. Morgan Dockrell: Diseases of Nails.
WEST LONDON HOSPITAL (Hammersmith-rd., W.).—5 P.M. Dr. Seymour-Taylor: Cases of Thoracic Aneurysm. (Post-graduate Course.)
SOCIETY OF ARTS.—8 P.M. Mr. Thomas Child: Peking.

THURSDAY.—ROYAL INSTITUTION.—3 P.M. Mr. W. S. Lilly: Four English Humourists of the Nineteenth Century. (III.)
SOCIETY OF ARTS (Imperial Institute).—4.30 P.M. Sir Alexander Wilson (for Mr. S. E. J. Clarke of Calcutta): India and its Women.

FRIDAY.—ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—11 to 1 P.M. Dr. Barratt: The Pathology of the Skin.
ROYAL INSTITUTION.—3 P.M. Mr. Henry Irving: Acting—An Art.

SATURDAY.—ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square W.C.).—11 to 1 P.M. Dr. Barratt: The Pathology of the Skin. 5 P.M. Dr. Morgan Dockrell: Tuberculosis of the Skin.
ROYAL INSTITUTION.—3 P.M. Mr. Lewis F. Day: Stained Glass Windows and Painted Glass. (III.)

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET should be addressed "To the Manager."

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE

THE INDEX TO THE LANCET.

THE Index for the last half-year was published in our issue of Dec. 29th, which completed the second volume of the year 1894. Those of our subscribers who may wish to be supplied with loose copies can obtain the same (without extra charge) on making application to the Manager.

THE POST AS A MEDIUM OF REPREHENSIBLE CIRCULARS.

A VALUED CORRESPONDENT sends us a circular received by one of his patients a few days after the announcement in the *Times* of the birth of a son. The burden of the circular was to urge the importance of circumcision as a duty to one's male progeny on all moral and physical grounds. The illiterate and ungrammatical composition of the circular does not atone for its audacity in its virtual reflection on Providence, or for the insult to respectable people in receiving such a document. We have before pointed out how the post becomes an agent for mischief in the hands of such persons. We would recommend any person receiving such documents to forward them to the Home Secretary and the Public Prosecutor for their consideration. Some remedy should be devised by these authorities for such uses of the post.

Westwood.—Our correspondent is strongly advised not to undergo the treatment to which he alludes.

CLUBS AND CHRONIC CASES.

To the Editors of THE LANCET.

SIRS,—Will some of your many readers give me the benefit of their opinion upon the following case—as to whether it should be termed "chronic"? A member of a lodge of Shepherds has received sick pay from the funds during the past five years upon seven different occasions on account of gout, for various periods, in all amounting to 168 working days out of a possible 1464. He has always, excepting on one occasion, when he returned to his work before he had regained his strength, in my opinion, been cured, and certified by me as able to follow his employment. There has been an absence of stiffness or alteration in structure or form of his joints and of any obvious impairment of the organs of circulation or digestion—the usual indications of chronic disease. He has been able to work satisfactorily between each attack, and from Oct. 14th, 1893, to Dec. 17th of last year he did not come upon the lodge at all. The secretary and other members of this the largest lodge of Shepherds in the district are disposed to view this case as one of chronic disease, taking as their text the "Dictionary of Medical and Surgical Knowledge," "chronic" being there described as "any disease of long standing, the opposite of acute, a term applied to all diseases which have passed their first or acute stage without being cured."

I am, Sirs, yours faithfully,

Jan. 11th, 1895. PODAGRA.

AN INQUIRY.

To the Editors of THE LANCET.

SIRS,—Will you allow me to ask through THE LANCET for information concerning lycetol, which I am told is very beneficial in the treatment of gout, but about which I have not been able to obtain any particulars?

I am, Sirs, yours truly,

Falmouth, Jan. 17th, 1895. ARTHUR B. HARRIS, M.D.

A TAPEWORM IN THE URETHRA.

DR. AXEL SPOOF, writing in *Duodecim*, a Finnish medical journal, mentions the case of a man who complained of pain in the region of the bladder, which whenever he sat down was also felt in the perineum—a trouble which he had had for several years. When Dr. Spoof saw him he was engaged in trying to draw a tapeworm from the urethra, the head having been the first portion to appear. All attempts at traction causing pain, it was decided to desist, and to introduce an opium suppository into the rectum. The next day the worm was easily removed and the patient was able to micturate freely, though he required to do so somewhat frequently. The urine was clear, but it contained a considerable number of white blood-corpuscles. No ova could be discovered. The patient was able to return to his home without delay.

Adenoid.—Our correspondent does not give us sufficient information to make it possible for us to reply. And with all the facts before us the proper fee for a particular surgeon to charge a particular patient for a particular operation is not a thing about which a definite decided opinion can always be given.

SULPHUR *v.* ANTITOXIN IN THE TREATMENT OF DIPHTHERIA.

To the Editors of THE LANCET.

SIRS,—To my mind it seems extraordinary the way the medical profession rush, one might almost say blindly, after every new treatment. I should have thought that recent disappointments—the treatment of tuberculosis, for example—would have been a warning, and that caution would be the watchword. We see published in lay papers the wonderful properties of antitoxin, we hear of prominent men in the profession actually wanting subscriptions to found a laboratory for the manufacture of this almost untried antidote to diphtheria. Our old friend sulphur tells the diphtheritic to go and wash in Jordan and be clean. His advice is too simple; there is no display about it. The profession do not like it. Dr. Sumpter in your issue of Dec. 8th gives sulphur a testimonial to which antitoxin cannot hold a candle. Further, Dr. Mules in the same issue writes stating his disappointment in antitoxin. In these cases even one old friend turns up on the successful side. I can imagine the antitoxites saying, "Fancy condemning the treatment because it has failed in one or two cases," and yet we are constantly hearing the new remedy extolled from an experience of one case only. It has been remarked that sulphur has only a local action. I say such is not the case. Observe the silver worn by those who have taken sulphur for any time, and behold the result. Examine the sputum of a patient taking sulphur and the unbeliever must be convinced. As far as my own experience goes, and that of my professional brethren who have used sulphur in the *proper* way, the dread of diphtheria has almost disappeared. Sulphur can be used locally and constitutionally with the least possible inconvenience in either adult or infant. Swabbing the throat is objectionable in infants, especially as it frightens the child just at the time that all nervous shocks should be avoided. How is it proposed to give an infant a hypodermic injection without giving a severe nervous shock? I suggest that before going into ecstasy over a mere acquaintance we give our old friend an unbiased trial. The best statistics published give antitoxin, compared with sulphur, quite a secondary position. I ask that two hospitals be established where diphtheria is prevalent, and that every alternate case be admitted to the sulphur and antitoxin hospital for twelve months. If I were a betting man I would lay two to one on sulphur.—I am, Sirs, your faithfully,

Aberdovey, Dec. 11th, 1894. W. HAWKINS CUTHBERT, L.R.C.P. &c.

TREATMENT OT TAPEWORM.

To the Editors of THE LANCET.

SIRS,—Will any of your readers kindly tell me the best way of getting rid of tapeworm? I have prescribed pomegranate and male fern in drachm doses, given fasting, and though this readily expels the worm it always returns. I am, Sirs, yours faithfully,

Jan. 21st, 1895. A. M. S.

"CARAMELS."

To the Editors of THE LANCET.

SIRS,—Can any of my medical brethren tell me what caramels are? I was lately told by a lady that they were much used to improve the bust when the mammæ were small or wasted. This is something new to me, and I was not able to say whether they were injurious or not.

I am, Sirs, yours truly,

Jan. 21st, 1895. M.R.C.S. (Retired).

"POISONING BY NUTMEGS."

To the Editors of THE LANCET.

SIRS,—A reference to Section 386:3 of the "Medical Digest" would have enabled Mr. Simpson to learn that the case reported by him in the last issue of THE LANCET did not stand by itself, several other observers having reported similar symptoms after overdoses of nutmeg.

I am, Sirs, yours obediently,

Boundary-road, N.W., Jan. 19th, 1895. R. NEALE, M.D. Lond.

THE EDISON-LALANDE GALVANO-CAUTERY.

To the Editors of THE LANCET.

SIRS,—Will any professional brother who has used the large-sized Edison-Lalande cells for minor galvano-cautery operations kindly give me the benefit of his experience? Do they work well and last well, and are they fairly constant? I am, Sirs, yours faithfully,

Jan. 24th, 1895. N.

THE VALIDITY OF BONDS IN CASE OF MEDICAL AID ASSOCIATIONS &c.

Spes.—Many of the medical officers of medical aid associations, feeling the galling nature of their work and position, would gladly escape from it. One of the modes of escape is the theory that contracts with a body of laymen for medical service are without force. This is not a sound position. It has been repeatedly negatived in courts of law, which are notoriously strong in enforcing contracts. And ethically a bond is a bond and cannot be altered. The only course open to gentlemen so situated is to come to terms with their committee. Let those who are not so bound avoid such fetters.

"ON THE OCCURRENCE OF DIPHTHERITIC PARALYSIS WITHOUT PREVIOUS FAUCIAL AFFECTION."

To the Editors of THE LANCET.

SIRS,—On turning over the leaves of my last year's volumes of THE LANCET I was surprised to find that in the one for Nov. 3rd I had overlooked the above article by Dr. Leonard G. Guthrie. In it he summarises evidence found in a number of cases published by various writers relative to the paralytic sequelæ of diphtheria. Among them he quotes from a case of mine which appeared in the *Medical Times and Gazette* as far back as the year 1866, entitled "Case of Diphtheria by Inoculation appearing on a Wound without the Corresponding Affection of the Fauces, and followed by Paralysis." My principal motive in referring to this article is for the correction—if you will kindly permit it—of the orthographical mistake which Dr. Guthrie has made in the spelling of my name. My patronymic—"Paterson"—is spelled with only one *t*, but Dr. Guthrie doubles this letter which makes the name "Patterson." In nine cases out of ten the person possessing the former name would be Scotch, and a like number called Patterson would be found to be English, so that the names are distinctive of the two countries. I find there are other slips, such as the year of publication. The case was published, as above stated, in 1866, but Dr. Guthrie writes in the footnote to his article 1868. Again, he gives the number of the paper 158 for the page 608, the correct indications being *Medical Times*, vol. ii., 1866, No. 858, p. 608, while his footnote reads *Medical Times*, vol. ii., 1868, p. 853. I am quite sensible these inaccuracies are trifling, but they are mistakes, and one, at least, if allowed to pass, might very easily in the future tend to mix matters, if not to raise a question as to the genuineness of my claim to the authorship of the case. Nor is the latter itself of so little importance as to be cast aside lightly, since it enabled me to challenge the generally accepted (localised) pathology of diphtheritic paralysis of the time, and to propose another theory of the cause of this disease, which, in the main, I think, still holds its ground. The weakest point of the case, according to the present-day critic, it would seem, is the possibility of sore throat having been overlooked, and the cutaneous sore mistaken for diphtheria. I dare pledge my word, however, that there are absolutely no grounds for any such suspicion save—*humanum est errare*—the possibility of the thing. That there was no throat affection either before or accompanying the disease the late Professor Pirrie, the patient, and myself were as certain as we could be. Therefore, the theory of Gull that the cause of the nervous sequelæ of diphtheria lay in the transmission of the disease by continuity of nerve tissue from its seat in the throat to the upper part of the spinal cord in my opinion became untenable, and, forming a different view from the foundation of fact which my case had established, I venture to put forward another which I believed to be more in accordance with truth, and of which it was said at the time that it had "caused the pathology of diphtheritic paralysis to be remodeled." Six-and-twenty years have passed since then; yet I think if anyone should deem it worth while to resurrect this particular copy of the *Medical Times*, and read the case as described on its original pages, he will be surprised to find how little, notwithstanding the exertions of celebrated investigators and full-blast laboratories, of practical knowledge has been added to the pathological hypothesis formulated by a humble worker in the field of medicine more than a quarter of a century ago. In those days diphtheritic paralysis was of common occurrence. How is it that it is met with so seldom now? I would like to know if this is an exceptional experience.—I am, Sirs, yours faithfully,

A. ROSS PATERSON, M.D. Aberd., M.R.C.P. Edin.

Stockton-on-Tees, Jan. 22nd, 1895.

*** We insert this letter from Dr. Paterson that the inaccuracies to which he alludes may be, as they should be, duly corrected; but we see nothing in Dr. Guthrie's paper that appears to minimise the value of Dr. Paterson's case. On the contrary, the case is twice quoted as being very important.—ED. L.

During the week marked copies of the following newspapers have been received:—*Bath Journal, Carlisle Patriot, Gloucester Journal, Wolverhampton Chronicle, Swansea Journal, Llandudno Directory, Nottingham Guardian, Glasgow Evening News, Ayrshire Post, Dundee Advertiser, Times of India, Sussex Daily News, Croydon Guardian, Birmingham Gazette, South Wales Daily Star, Andover Advertiser, Leek Times, Falkirk Herald, Blackpool Times, Hereford Times, Admiralty and Horse Guards Gazette, Wigan Observer, Northern Guardian, Buxton Herald, Scottish Highlander, Woodbridge Reporter, Leighton Buzzard Observer, Bury and West Suffolk Advertiser, Cork Constitution, Cork Daily Herald, Matlock Visitors' List, Westminster Times, Warwick Times, Berwick County Gazette, Staffordshire Post, Reynolds's Newspaper, &c., &c.*

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